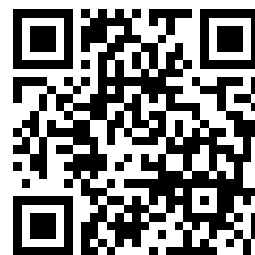


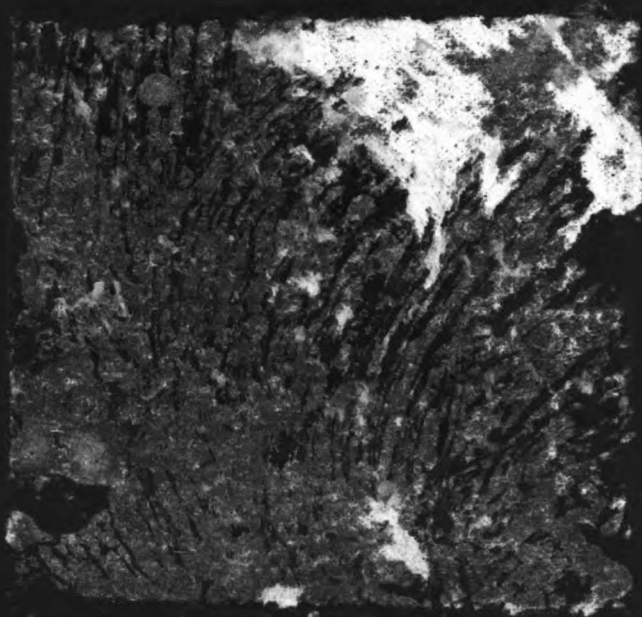
A. CARR'S,
ILLUSTRATED CATALOGUE
1874.
43 CORTLANDT ST.
New-York.

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LIBRARY
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ILLUSTRATED CATALOGUE

OF

BRASS WORK & SUPPLIES

FOR

PLUMBERS, ENGINE BUILDERS, STEAM AND GAS FITTERS.

SELDEN'S

DIRECT ACTION STEAM PUMP.

CARR'S POSITIVE CIRCULATING
URPIGHT RADIATOR.

IRON PIPE, BRASS, MALLEABLE & GRAY IRON FITTINGS
FOR STEAM, WATER AND GAS,

MANUFACTURED BY

A. CARR,

43 CORTLANDT STREET,

NEW YORK.

VRASBLL
STAT2 A9 3HT
303.1100

Entered according to Act of Congress, in the year 1873, by A. CAMP, in the Office of the
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D. H. TUTTLE,
DESIGNER AND ENGRAVER,
5 Beckman Street,
New York.

J. K. LEES,
FINE BOOK & JOB PRINTER,
210 Fulton Street,
New York.

SELDEN

Direct Action Steam Pump.

In bringing the "Selden Pump" before the public, the aim of the inventor has been to combine a simple, efficient, and durable pump.

It having been in use in many places for nearly four years with a success unequalled by any other steam pump, justifies us in stating that it has all the qualities enumerated; that its parts are all simple and easy of access; it is efficient in working, being positive, having no dead centers; will not stop while there is steam to drive it, and will start at any part of the stroke, discharging the water of condensation, and is constructed with an eye more to use than show, yet finished in its working parts as well as any other pump.

Being manufactured on the premises, we are at all times prepared to repair, alter, or to make at the shortest notice.

We claim to do as much work with them, and with as little steam, as can be done with any other pump of the same size.

It involves no untried principles of action, both the steam valves are the ordinary slide valves (familiar to every engineer), the small or auxillary valve working within a recess in the main valve, both working on the same valve seat, a feature sure to be appreciated by all.

The water end will also commend itself to the practical engineer.

The valve chambers are so constructed as to permit the attendant to get at the valves by the removal of a single nut. The valves are flat, and made of the best composition metal, or faced with rubber, leather, or such other material, as experience has proved to be best for the purpose for which the pump is intended. In cases where it is necessary to have a new valve, and parties are beyond the reach of the manufacturers, the valve being flat, a piece of flat wood of the same size will answer equally as well as the composition valves.

The valve seats are also of composition metal, and are equally adapted for hot or cold water, and being made in duplicate, they can, if worn out or damaged, be removed and replaced by new seats at a trifling cost. The steam and water cylinders are fitted with the most perfect spring ring packing.

We have many letters certifying to the superiority of the Selden Pump, of which the following are a few:—

CARATAL, Venezuela, S. A., February 20, 1870.

A. CARR, Esq., New York, U. S.

DEAR SIR: In answer to your inquiry, I would state that in February, 1870, I ordered nine of your pumps—some of them to be used as boiler feeders and others as mining pumps.

They were all shipped to this place and erected on the gold mines. One of the No. 5 size was put down a shaft 175 feet from the surface, and steam conveyed down through a $1\frac{1}{4}$ inch pipe. As soon as steam was admitted to the pump it started without any trouble, working as smoothly as if lifting the water but a few feet to the surface. The water in the mine was soon exhausted, and then we commenced sinking, with the aid of the pump, which was in charge of the miners. It has been running eight months, and during that time it has given no trouble, or cost anything for repairs. I have had considerable experience, both in Colorado and North Carolina, with most of the other pumps built, and while I can truly say there is a number of very excellent pumps I have used for mining purposes, there is not one that has given me such good satisfaction as the "Selden" Pump.

The other pumps were put to ordinary work as feeders, etc., and gave every satisfaction—they were in every respect as represented by you.

I am, yours very truly,

JAMES BAXTER,

Mining Engineer.

OFFICE Lodi MANUFACTURING COMPANY,

Office, 66 Cortlandt, Street,

New York, June 10, 1871.

A. CARR, Esq.

DEAR SIR: Last winter, with a little doubt and reluctance, being in want of a steam pump, I took your recommendation and purchased a Selden Direct Action Steam Pump. My engineer and foreman demurred at using it, before they tried it, but now say it is the best pump they have ever used, and that it gives them the least trouble. I have since then bought and put in use two more of them, and shall order another in a few days,* which is the best evidence I can give of how they suit me. I can recommend them as the most reliable pump in the market.

Yours respectfully,

JAMES R. DEY.

* Since ordered.

NEW YORK, June 13, 1871.

A. CARR, Esq.

DEAR SIR: Yours of the 10th is received. The Selden Pump, purchased about one year ago, has been constantly running, doing its work perfectly, without repairs, and given no trouble of any sort. I believe the Selden Pump a good one.

Yours respectfully,

DAVID M. NICHOLS,

Boiler Maker.

GREENVILLE, N. J., June 19, 1871.

ADAM CARR, Esq.

DEAR SIR: We have used your No. 3 Selden Pump for the last twelve months, and during that time it has given us satisfaction. Can recommend it to parties about buying.

Respectfully yours,

WM. CURRIE & BRO.

MONSEY, N. Y., June 17, 1871.

DEAR SIR: We received your inquiry in regard to pump, and will say that we think it one of the best that we have ever used. Its simplicity and durability recommend it to all country mills using steam, on account of its less liability to get out of order, which is very desirable, on account of not being near to manufactory to get repairs done. The size we have, with one inch pipe, will supply our engine, thirty horse power, at about thirty strokes a minute. It is one of the first that you made, and has not all the improvements of the later ones.

Yours truly,

STEPHENS & GURNEE.

DUNMORE, August 16, 1871.

A. CARR, Esq., 43 Cortlandt Street, New York.

DEAR SIR: In reference to the performance of your steam pump, we have been working it pretty much during the past year, under a head of 120 feet, and is still working in good order. We think very much of it.

Yours truly,

JOHN BUTLER,

Engineer Penn. Coal Co.

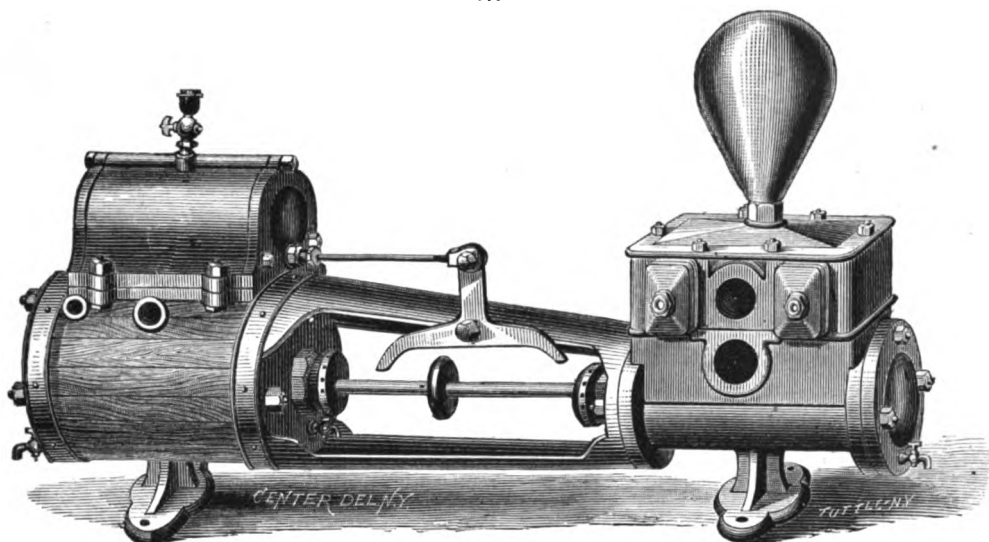
Large Pumps for Mines, Water Works, Fire and Wrecking Pumps, either piston or plunger.

We do not hesitate to offer this pump as the most perfect, simple, efficient, and durable pump ever placed before the public. They are fully warranted in every respect.

SELDEN

DIRECT ACTION STEAM PUMP.

Patented August 2, 1870, and December 20, 1870.

**PRICE LIST**

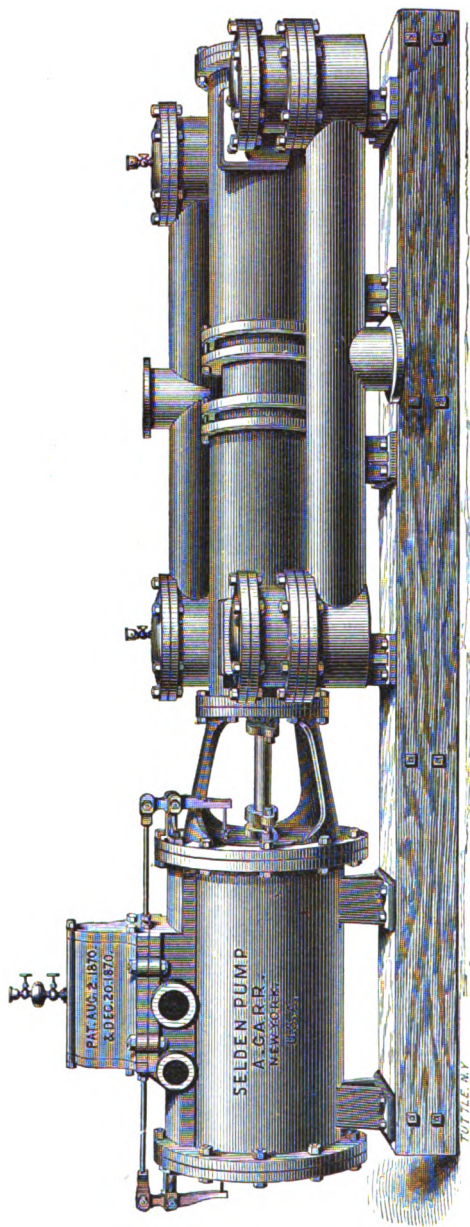
Of Boiler Feed Pumps, or for Pumping under Great Pressure, or to a High Elevation.

No.	Diam. of Steam Cylinder in ins.	Diam. of Water Cylinder in ins.	Length of Stroke in inches.	No. of Strokes per minute to pump gals. per minute.	No. strokes per minute capable of running.	Size of Steam Pipe.	Size of Exhaust Pipe.	Size of Suction Pipe.	Size of Discharge Pipe.	Prices.
1	3	1½	5	150 strokes 10 gals.	1 to 300	½ in.	½ in.	Two 1 in.	Two ½ in.	\$125
2	4	2½	6	" " 18 "	1 300	¾	¾	" 1½	" 1	150
3	5	3	7	" " 32 "	1 275	1	1	" 2	" 1½	225
4	6	3½	8	" " 50 "	1 275	1	1	" 2½	" 2	275
5	7	4	9	125 " 60 "	1 250	1½	1½	" 3	" 2½	375
6	8	5	10	" " 127 "	1 250	1½	1½	" 3½	" 3	400
7	10	6	12	100 " 146 "	1 200	2	2	" 4	" 3½	475
8	12	7	12	" " 200 "	1 200	2½	2½	" 4½	" 4	550
9	14	8	12	" " 280 "	1 200	3	3	" 5	" 5	600
10	16	10	16	75 " 408 "	1 200	3½	3½	" 6	" 6	800
11	18	12	24	50 " 550 "	1 180	4	4	" 8	" 7	These sizes made to order.
12	20	14	24	" " 750 "	1 180	4½	4½	" 10	" 8	
13	24	18	24	" " 1300 "	1 150	5	5	" 12	" 10	
14	30	22	24	" " 2000 "	1 150	6	6	" 14	" 12	

When ordering a pump please state for what purpose it is required, as a knowledge of the condition under which it is to be used will enable us to supply valves and other parts found to suit in similar cases. We will line them with composition if wanted to pump liquids requiring it. Steam, Exhaust, Suction and Discharge Pipes are duplicated, one each side of the pump, so that connections may be made on either side.

MINING AND WATER-WORKS PUMPS.

Arranged with special reference to pumping water containing dirt or gritty matter.



Upon the next page will be found the most complete list of MINING and WATER-WORKS PUMPS ever offered to the public. They are of the style known as PLUNGER PUMPS, having two water cylinders, the same plunger working in both, making it a double acting pump, thus enabling them to work under the greatest pressure with perfect steadiness.

To the valves and their construction I have given especial attention, they are all made so large that by lifting from three-eighths of an inch, in the smaller sizes, to one and a quarter of an inch, in the larger sizes, they will give the full capacity of the suction and discharge pipes. I have never yet built a pump in which the action of the valves could be heard even with the ear upon the valve chamber, when working under a test pressure equal to three hundred and fifty (350) feet. I would call especial attention to the construction of my valve chambers. It will be observed that they are made with the upper and lower chambers cast in separate parts, and having the plate upon which is the valve seat between them, the whole being securely bolted together, should any accident occur to the seat plate it can be readily taken out, and repaired or renewed without loss of any other part. The valve seat is made of the best composition, and attached to the plate, and can be taken out and replaced in a few minutes by taking off the cover. The seats being made to template, can be furnished at any time, ready to put in.

They are very much superior to the piston pump for all situations where the water or other liquid is at all muddy or gritty, as the water cylinder is from one and a half to two inches larger than the plunger; the surfaces are never in contact, and so avoid the friction and grinding out of the surfaces, and consequent leaking and great loss of time, and the expense for repairs of the piston pumps.

A. CARR, MANUFACTURER, NEW YORK.

In the steam end I use the same valves as are used in the piston pump, the flat-faced slide-valves familiar to every engineer; but the valve gear, it will be observed, is different, being the most simple valve gear now in use, it is operated directly by the travel of the piston, and is absolutely positive in its action. The pump will not stop so long as it has steam to drive it, and there is no point where it can stop without leaving the steam ports full open thus insuring absolute certainty that it will start at once when the steam is let on. By the use of this valve gear, I can bring the steam and water cylinders of my longest stroke pumps so near together, as just to leave sufficient room to pack the glands, making them very compact and strong. The valves will discharge the water of condensation without choking. I have often run my pumps with water instead of steam, and they will run as steady and reverse as promptly as with steam. My pumps will start promptly and run well under water, as has been proven on several occasions by their being submerged by the flooding of the mine. On one occasion there being no steam for several days, owing to the boilers giving out, the mine was flooded, yet as soon as steam was let down the pump started promptly, and was run at a higher rate of speed than it had ever been run at before. .

I build these pumps of great strength, of the best material, and with a view to the severe duty they are required to perform. Every part is made to gauge and template, so that any part can be duplicated at any time.

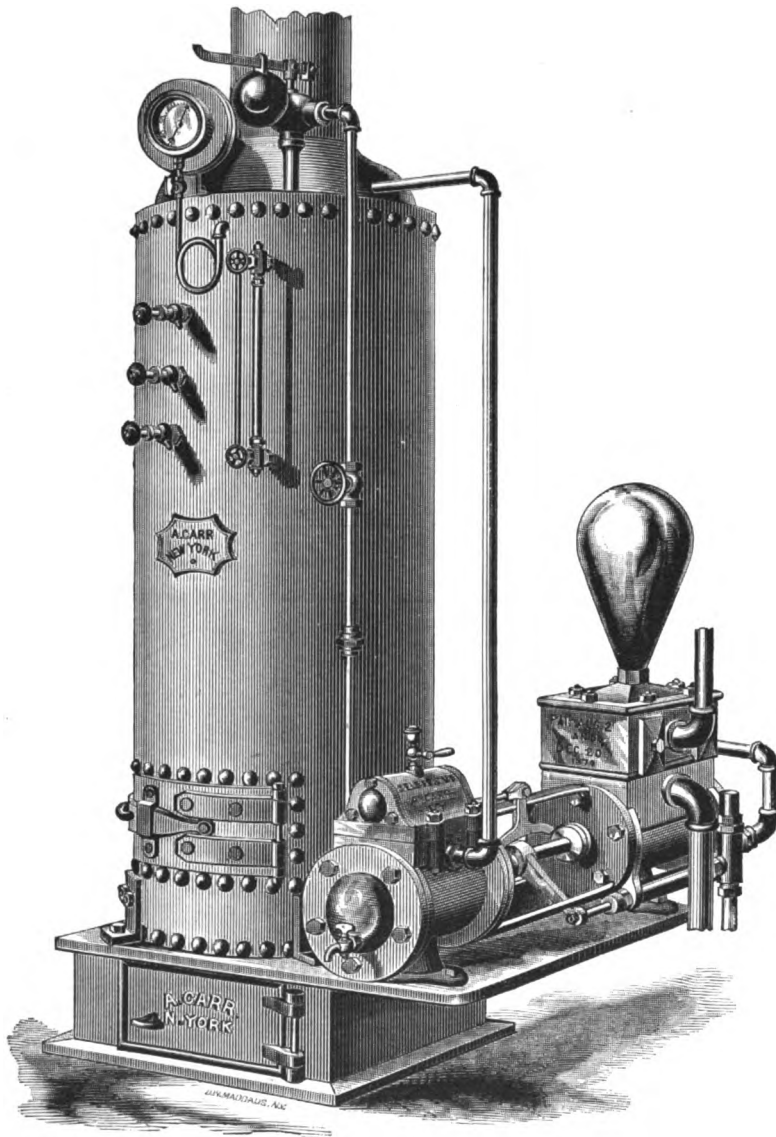
I offer these pumping engines upon the fullest guarantee that they will perform the duty for which they are sold.

PRICE LIST.

Size of Steam Cylinder, Inches.	Size of Plunger, Inches.	Length of Stroke, Inches.	Gallons per Stroke.	Strokes per Minute.	Size of Steam Pipe, Inches.	Size of Exhaust Pipe, Inches.	Size of Suction Pipe, Inches.	Size of Discharge Pipe, Inches.	PRICE.
8	5	10	.86	1 to 200	1	1 $\frac{1}{4}$	3	3	\$550.00
8	6	18	2.20	1 to 150	1 $\frac{1}{2}$	1 $\frac{1}{2}$	4	4	650.00
10	6	18	2.20	1 to 150	1 $\frac{1}{2}$	2	4	4	700.00
10	6	30	3.66	1 to 75	1 $\frac{1}{2}$	2	4	4	PRICES FURNISHED ON APPLICATION.
12	6	18	2.20	1 to 125	2	2 $\frac{1}{2}$	4	4	
12	6	30	3.66	1 to 75	2	2 $\frac{1}{2}$	4	4	
12	8	18	3.92	1 to 150	2	2 $\frac{1}{2}$	6	6	
12	8	30	6.54	1 to 75	2	2 $\frac{1}{2}$	6	6	
16	8	18	3.92	1 to 150	2 $\frac{1}{2}$	3	6	6	
16	8	30	6.54	1 to 75	2 $\frac{1}{2}$	3	6	6	
18	10	36	12.27	1 to 60	2 $\frac{1}{2}$	3	8	8	
18	12	36	17.65	1 to 60	2 $\frac{1}{2}$	3	10	10	
24	12	36	17.65	1 to 60	3 $\frac{1}{2}$	4	10	10	
24	12	48	23.53	1 to 50	3 $\frac{1}{2}$	4	10	10	
24	12	60	29.40	1 to 40	3 $\frac{1}{2}$	4	10	10	
24	12	72	35.30	1 to 30	3 $\frac{1}{2}$	4	10	10	
30	15	36	27.54	1 to 60	4	5	12	12	
30	15	48	36.72	1 to 50	4	5	12	12	
30	15	60	45.90	1 to 40	4	5	12	12	
30	15	72	55.08	1 to 30	4	5	12	12	
36	18	36	39.66	1 to 60	5	6	15	15	
36	18	48	52.88	1 to 50	5	6	15	15	
36	18	60	66.10	1 to 40	5	6	15	15	
36	18	72	79.32	1 to 30	5	6	15	15	

COMBINED PUMP AND BOILER,

WITH BOILER FEED ATTACHMENT.



(Cut represents 7 inch Tank Pump, with Feed Pump attached, and Boiler, complete.)

A. CARR, MANUFACTURER, NEW YORK.

PRICE LIST OF THE SELDEN PATENT COMBINED PUMP AND BOILER, COMPLETE WITH FIXTURES.

SIZE OF PUMP.	DIMENSIONS OF PUMP.										DIMENSIONS OF BOILER.						PRICE COMPLETE.
	Diam. of Steam Cylinder.	Diam. of Water Cylinder.	Stroke.	Gallons per Stroke.	Strokes per Minute.	Steam Pipe.	Exhaust Pipe.	Section Pipe.	Dis- charge Pipe.	Diameter of Shell.	Height of Shell.	Number of Tubes.	Diameter of Tubes.	Length of Tubes.	Size of Fire-box.		
No. 1	4	2½	5	.074	1 to 350	½	¾	1½	1	24 in.	60 in.	25	2 in.	42 in.	18 x 18	\$465.00	
“ 2	4	2½	6	.106	1 to 350	½	¾	1½	1	24 in.	60 in.	25	2 in.	42 in.	18 x 18	\$525.00	
“ 3	5	3	7	.251	1 to 300	¾	1	1½	1½	24 in.	60 in.	25	2 in.	42 in.	18 x 18	\$575.00	
“ 4	6	3½	7	.334	1 to 300	¾	1	2	1½	24 in.	60 in.	25	2 in.	42 in.	18 x 18	\$600.00	
“ 5	7	4	10	.688	1 to 250	1	1½	2½	2	30 in.	72 in.	36	2 in.	54 in.	21 x 18	\$825.00	
“ 6	8	5	10	.850	1 to 250	1½	1½	3	2½	30 in.	72 in.	36	2 in.	54 in.	21 x 18	\$850.00	
“ 7	10	6	12	1.468	1 to 200	1½	2	3½	3	36 in.						\$1,050.00	
“ 8	12	7	12	1.953	1 to 200	2	2½	4	3½	36 in.						\$1,150.00	
A	4	4	5	.27	1 to 350	½	¾	2½	2½	24 in.	60 in.	25	2 in.	42 in.	18 x 18	\$550.00	
B	5	5	7	.72	1 to 300	¾	1	3	2½	24 in.	60 in.	25	2 in.	42 in.	18 x 18	\$650.00	
C	7	7	10	1.65	1 to 250	1	1½	4	3½	30 in.	72 in.	36	2 in.	54 in.	21 x 18	\$850.00	
D	8	8	12	2.65	1 to 200	1½	1½	4½	4	30 in.	72 in.	36	2 in.	54 in.	21 x 18	\$950.00	

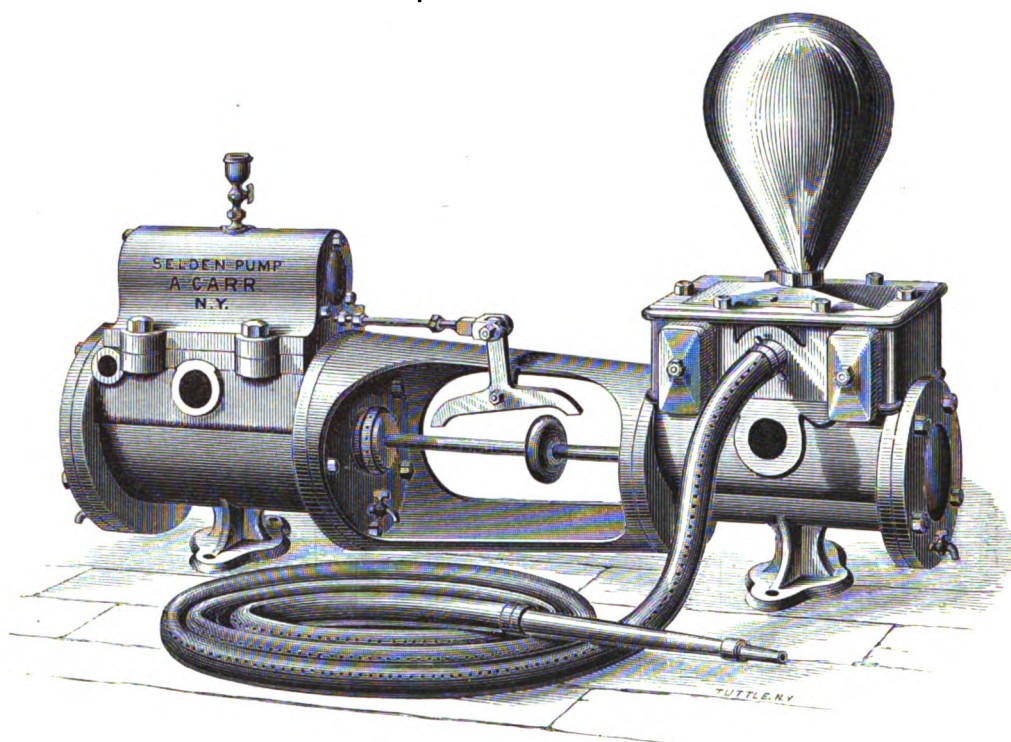
In the combination of Portable Boiler and Pump, illustrated upon the opposite page, will be found the most simple, compact and complete arrangement for the pumping of water into tanks for dwellings, factories and railroad water stations. It can be placed at the most convenient point, at river, well, or spring, and the water forced to the tank any required distance or height. As the connections are all complete between the boiler and pump, and all cocks, valves and gauges in their place, it does not require a skilled mechanic to set up and operate it. It can be managed with safety by a person of ordinary intelligence, after a few hours instruction. The boilers will, in all cases, be made of the best iron and tested to a hydrostatic pressure of not less than 150 lbs.

Where water is to be forced to a greater height than 50 to 75 feet, the numbered pumps, from 1 to 8, are recommended; but for all cases where the height is less, the letter or tank pumps are recommended as they will give a much greater pumping capacity at no greater cost. The numbered pumps will feed the boiler direct, but where the lettered or tank pumps are used, there is a plunger pump attached for feeding the boiler, as will be seen in the engraving. Where required these pumps have an improved hand attachment for filling boiler, or feeding when steam is low. The pump being attached to cast-iron plate extending from the side of the ash-box, obviates the necessity of building foundation, setting and connecting pump, etc., after it has arrived at its destination.

In ordering, please state fully the particular service required of Pump.

NOTICE.—The prices on Boilers are liable to be changed at any time, according to the state of the iron market.

SELDEN PATENT STEAM FIRE PUMP.



PRICE LIST.

No.	Diam. Steam Cylinder in inches.	Diam. Water Cylinder in inches.	Length of Stroke in inches.	Gallons per Stroke.	Strokes per Minute.	Size of Steam Supply Pipe.	Size of Steam Exhaust Pipe.	Size of Suction Pipe.	Size of Discharge Pipe.	PRICE.
6½	10	5	12	1.02	1 to 200	1½	2	Two 3	Two 2	\$425.00
7	10	6	12	1.46	1 to 200	1½	2	" 3½	" 3	475.00
7½	12	6	12	1.46	1 to 200	2	2½	" 3½	" 3	500.00
8	12	7	12	1.99	1 to 200	2	2½	" 4	" 3½	550.00
8½	14	7	12	1.99	1 to 200	2	2½	" 4	" 3½	575.00
9	14	8	12	2.61	1 to 200	2	2½	" 4½	" 4	600.00
9½	16	8	16	3.48	1 to 200	2	2½	" 4½	" 4	750.00
10	16	10	16	5.43	1 to 180	2½	3	" 6	" 5	800.00
10½	18	9	24	6.60	1 to 180	2½	3	" 5	" 4	MADE TO ORDER.
11	18	12	24	11.75	1 to 180	2½	3	" 8	" 7	
11½	20	10	24	8.16	1 to 180	3	3½	" 6	" 5	
12	20	14	24	15.95	1 to 180	3	3½	" 10	" 8	
12½	24	12	24	11.75	1 to 180	3½	4	" 8	" 7	
13	24	18	24	26.43	1 to 150	3½	4	" 12	" 10	
13½	30	15	24	18.36	1 to 150	4	5	" 10	" 8	
14½	30	22	24	39.49	1 to 150	4	5	" 14	" 12	

In the above list of fire pumps the full numbered pumps are intended for situations where the buildings are not very high. The half-numbers, having larger steam cylinders, are better adapted to situations where the buildings are high, as they have much greater power than the other. These should always be used where parties carry their steam at a low pressure.

They are the most efficient fire pumps now made having two discharge openings they can be used for feeding the boiler from the one side, while the hose remains permanently attached upon the other. If used for fire purposes only, two lines of hose can be permanently attached to the pump.

TANK PUMPS,

With or without Boiler Feed Pump attached.

The following pumps are made especially for raising water or other liquids into tanks or reservoirs for railroad stations, tanneries, oil works, etc., etc.

PRICE LIST.

Diameter of Steam Cylinder in Inches.	Diameter of Water Cylinder in Inches.	Length of Stroke in Inches.	Gallons per Stroke.	Strokes per Minute.	Size of Steam Supply Pipe.	Size of Steam Exhaust Pipe.	Size of Suction Pipe.	Size of Discharge Pipe.	PRICE.
4	4	6	.33	1 to 275	$\frac{1}{4}$	$\frac{3}{4}$	Two 2 $\frac{1}{2}$	Two 2	\$200.00
5	5	7	.63	1 to 275	$\frac{3}{8}$	1	" 3	" 2 $\frac{1}{2}$	300.00
6	6	8	.97	1 to 275	$\frac{1}{2}$	1	" 3 $\frac{1}{2}$	" 3	350.00
7	7	9	1.72	1 to 275	1	1 $\frac{1}{2}$	" 4	" 3 $\frac{1}{2}$	400.00
8	8	12	2.61	1 to 250	1	1 $\frac{1}{2}$	" 4 $\frac{1}{2}$	" 4	450.00
10	10	16	5.43	1 to 250	1 $\frac{1}{2}$	2	" 6	" 5	650.00
10	12	16	7.83	1 to 250	1 $\frac{1}{2}$	2	" 8	" 7	700.00
12	12	16	7.83	1 to 250	2	2 $\frac{1}{2}$	" 8	" 7	800.00
14	12	24	11.75	1 to 200	2	2 $\frac{1}{2}$	" 8	" 7	These sizes made to order. Prices according to the peculiarities of the work they are required to do.
14	14	24	15.99	1 to 200	2	2 $\frac{1}{2}$	" 10	" 8	
14	18	24	26.43	1 to 175	2	2 $\frac{1}{2}$	" 12	" 10	
14	22	24	39.49	1 to 175	2	2 $\frac{1}{2}$	" 14	" 12	
18	12	24	11.75	1 to 175	2 $\frac{1}{2}$	3	" 8	" 7	
18	14	24	15.99	1 to 175	2 $\frac{1}{2}$	3	" 10	" 8	
18	18	24	26.43	1 to 150	2 $\frac{1}{2}$	3	" 12	" 10	
18	22	24	39.49	1 to 150	2 $\frac{1}{2}$	3	" 14	" 12	
18	24	24	47.	1 to 150	2 $\frac{1}{2}$	3	" 16	" 14	

Rubber, Leather, and Linen Hose, Screw and Patent Couplings, Play Pipes, Hydrant and Pump Connections, Water Valves, etc., on hand and to order.

LOCOMOTIVE PUMPS.

PRICE LIST.

	Diameter of Steam Cylinder.	Diameter of Plunger.	Length of Stroke.	Gallons per Minute.	Size of Steam Pipe.	Size of Exhaust.	Size of Suction.	Size of Discharge.	PRICE.
Horizontal or Vertical	4	2 $\frac{1}{2}$	5	25 to 50	$\frac{3}{8}$	$\frac{1}{4}$	1 $\frac{1}{2}$	1	\$150.00
	5	3	6	35 " 60	$\frac{1}{2}$	$\frac{3}{8}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	225.00

It can be hung under the footboard of the locomotive, or such other position as may be convenient.

LOW PRESSURE PUMPS.

The following pumps are used for pumping water for public and private buildings where steam at a low pressure can be used. They can be operated directly from low pressure heating apparatus, thus dispensing entirely with extra boiler or machinery; will run with steam as low as two pounds.

Size of Steam Cylinder.	Size of Water Cylinder.	Length of Stroke.	Gallons per Stroke.	Strokes per Minute.	Size of Steam Supply Pipe.	Size of Steam Exhaust Pipe.	Suction.	Discharge.	PRICE.
6	2	6	.08	1 to 275	$\frac{1}{4}$	$\frac{3}{4}$	1 $\frac{1}{2}$	1	\$225.00
8	3	9	.28	1 to 275	$\frac{3}{8}$	1 $\frac{1}{2}$	2	1 $\frac{1}{2}$	325.00

MARINE PUMPS.

The following list of pumps are arranged and fitted especially for steamboats, steamships, and all marine purposes. They are made with large open valves and water passages, calculated for fire, bilge water, or any purpose on ship board, without choking. The water valves are very large, and can be got at by removing one nut only. Cylinders are composition lined, and piston rods solid composition. The piston heads are composition with spring rings, or arranged for leather, as desired.

PRICE LIST.

Diameter of Steam Cylinder.	Diameter of Water Cylinder.	Length of Stroke.	Gallons per Stroke.	Stroke per Minute.	Size of Steam Pipe.	Size of Exhaust Pipe.	Size of Suction.	Size of Discharge.	PRICE.
7	4 $\frac{1}{2}$	10	.69	1 to 250	1	1 $\frac{1}{2}$	Two 2 $\frac{1}{2}$	Two 2	\$375.00
8	5	10	.85	1 to 250	1 $\frac{1}{2}$	1 $\frac{1}{2}$	" 3	" 2 $\frac{1}{2}$	400.00
10	5	12	1.02	1 to 250	1 $\frac{1}{2}$	2	" 3	" 2 $\frac{1}{2}$	425.00
10	6	12	1.46	1 to 250	1 $\frac{1}{2}$	2	" 3 $\frac{1}{2}$	" 3	475.00
10	7	12	1.99	1 to 250	1 $\frac{1}{2}$	2	" 4	" 3 $\frac{1}{2}$	512.00
10	8	12	2.61	1 to 200	1 $\frac{1}{2}$	2	" 4 $\frac{1}{2}$	" 4	537.00
12	5	12	1.02	1 to 200	2	2 $\frac{1}{2}$	" 3	" 2 $\frac{1}{2}$	462.00
12	6	12	1.46	1 to 200	2	2 $\frac{1}{2}$	" 3 $\frac{1}{2}$	" 3	512.00
12	7	12	1.99	1 to 200	2	2 $\frac{1}{2}$	" 4	" 3 $\frac{1}{2}$	550.00
12	8	12	2.61	1 to 200	2	2 $\frac{1}{2}$	" 4 $\frac{1}{2}$	" 4	575.00
14	5	12	1.02	1 to 200	2	2 $\frac{1}{2}$	" 3	" 2 $\frac{1}{2}$	487.00
14	6	12	1.46	1 to 200	2	2 $\frac{1}{2}$	" 3 $\frac{1}{2}$	" 3	537.00
14	7	12	1.99	1 to 200	2	2 $\frac{1}{2}$	" 4	" 3 $\frac{1}{2}$	575.00
14	8	12	2.61	1 to 200	2	2 $\frac{1}{2}$	" 4 $\frac{1}{2}$	" 4	600.00
16	10	16	5.43	1 to 200	2 $\frac{1}{2}$	3	" 6	" 5	800.00
16	12	16	7.83	1 to 200	2 $\frac{1}{2}$	3	" 8	" 7	MADE TO ORDER.
18	10	16	5.43	1 to 180	2 $\frac{1}{2}$	3	" 6	" 5	
18	12	16	7.83	1 to 180	2 $\frac{1}{2}$	3	" 8	" 7	
20	14	24	15.99	1 to 180	3	3 $\frac{1}{2}$	" 10	" 8	
20	18	24	26.43	1 to 180	3	3 $\frac{1}{2}$	" 12	" 10	
20	22	24	39.49	1 to 150	3	3 $\frac{1}{2}$	" 14	" 12	
24	14	24	15.99	1 to 150	3 $\frac{1}{2}$	4	" 10	" 8	
24	18	24	26.43	1 to 150	3 $\frac{1}{2}$	4	" 12	" 10	
24	22	24	39.49	1 to 150	3 $\frac{1}{2}$	4	" 14	" 12	

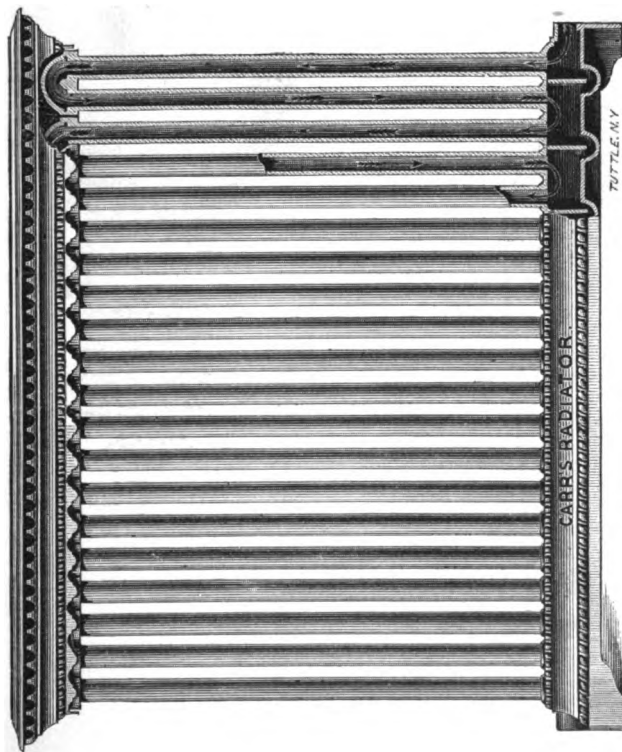
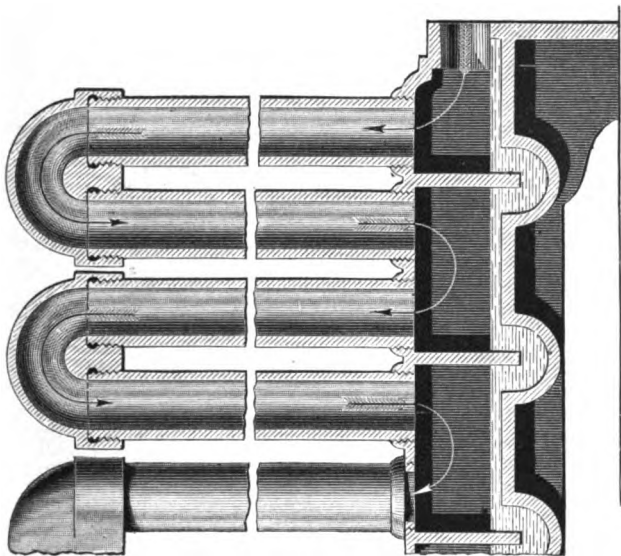
The above are made with solid composition water cylinders when desired.

RUBBER, LEATHER, AND LINEN HOSE.

Screw and Patent Couplings, Play Pipes, Hydrant and Pump Connections, Water Valves, etc., on hand and to order.

CARR'S POSITIVE CIRCULATING VERTICAL TUBE RADIATOR.

Patented May 6, 1878.



It has been the constant aim of the inventors and manufacturers of vertical tube radiators to secure a positive circulation of the steam in the tubes, in order to expel the air, and leave the whole of the radiating surface exposed to the steam. Many devices have been employed to accomplish this object, some of which have proved failures, and been abandoned, and the best of them fail in the first great requisite of vertical tube radiators, *positive circulation*; their failure is caused by the fact that the lower end of the pipe, or pipes, whether used singly and divided by a partition, or in pairs and connected at the top by return bends, have no positive inlet and discharge for the steam, both opening into a common steam chamber in the base, the steam will enter at the same time both sides of the single or divided pipe, or both pipes where connected by return bends, and force the air to the top of them, and the pressure being equal on both, there can be no circulation, and, consequently no radiation from that portion of the pipe exposed to the air, except as the air is heated by the steam, and as air is a very poor conductor of heat, the radiation will be very slight. There is no one who has had any experience with vertical tube radiators, but will have often noticed that some of the tubes will be hot while others are cold, and, again, some of them heated on the lower half of the tubes, while the upper half remains cold, caused by the want of a positive circulation, and consequent inability to expel the air.

An examination of the section of the above engraving of the Carr Radiator, will show that the object so long sought has been accomplished. A *positive circulation* of the steam being secured, while at the same time all trouble from the water of condensation is avoided. It will be observed in the section of the base, that between each pair of the pipes that are connected at the top, there are depressions in the bottom of the base, and a corresponding partition extending from the top of the base into the depression. When the steam is let on, the water of condensation passes along the bottom of the base, filling these depressions, passing under, and covering the bottom of the partitions passing up the first pipe, and thus preventing the passage of the steam. The steam will therefore follow the course of the arrows passing up the third pipe, and so into the third chamber, and so through any number of pipes to the meeting with the resistance of the water seal, it will pass up the third pipe, and so into the third chamber, and so through any number of pipes to the discharge or return pipe, and as there is no other course for it to follow, it must necessarily expel the air and heat the whole of the pipes, while the water of condensation will fall to the bottom of the base, and pass off under the partitions to the discharge pipe.

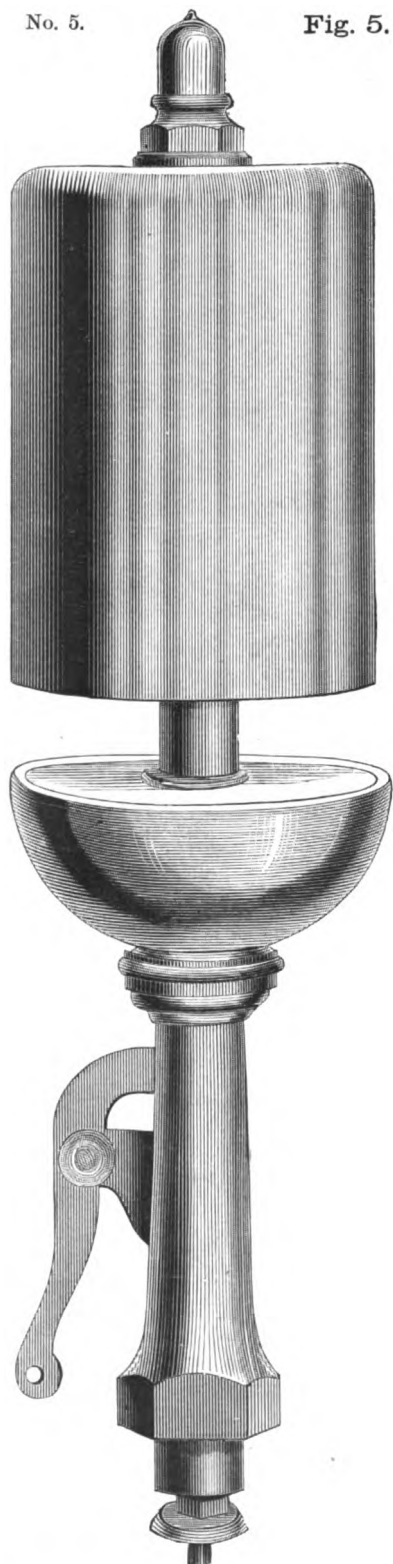
For low pressure or exhaust steam, this radiator is what has been long needed. It will work with a mere vapor, and without perceptible pressure, expelling the air with an ease and certainty that is not possible in any other.

STEAM WHISTLE.

BEST STEAM METAL.

No. 5.

Fig. 5.



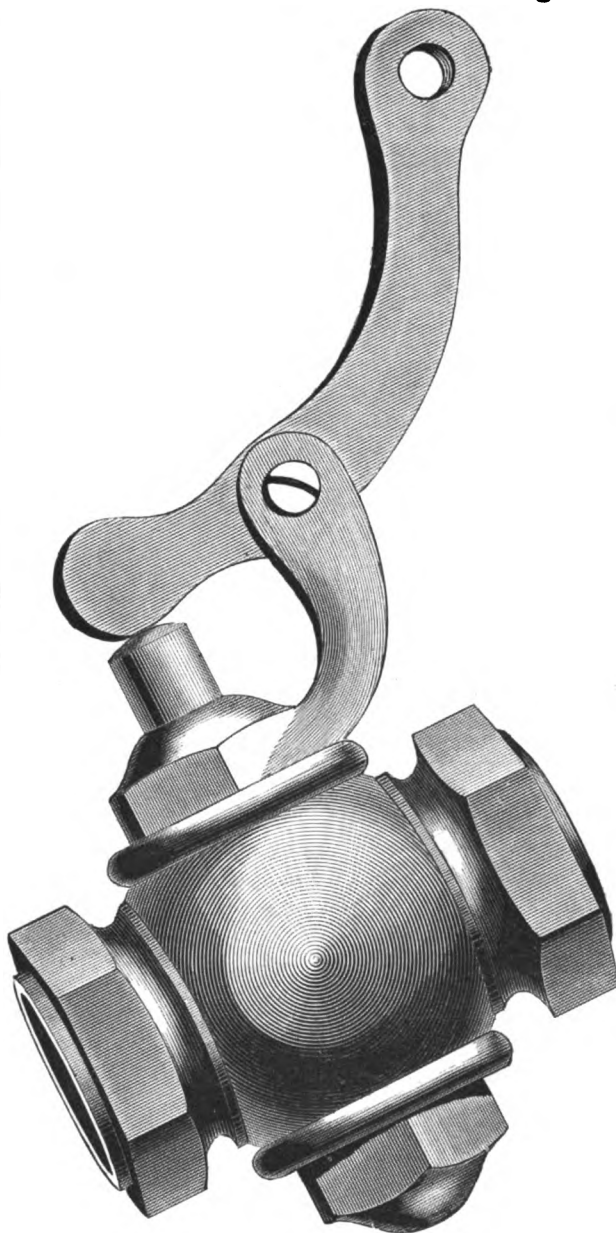
Diameter of Bell, 3, 4, 5, 6 inches.
Screwed for 1½, 1½, 1½, 2 inch Iron Pipe.

WHISTLE VALVE.

BEST STEAM METAL.

No. 1.

Fig. 6.



Sizes, ½, 1, 1½, 1½, 2, 2½ inches.

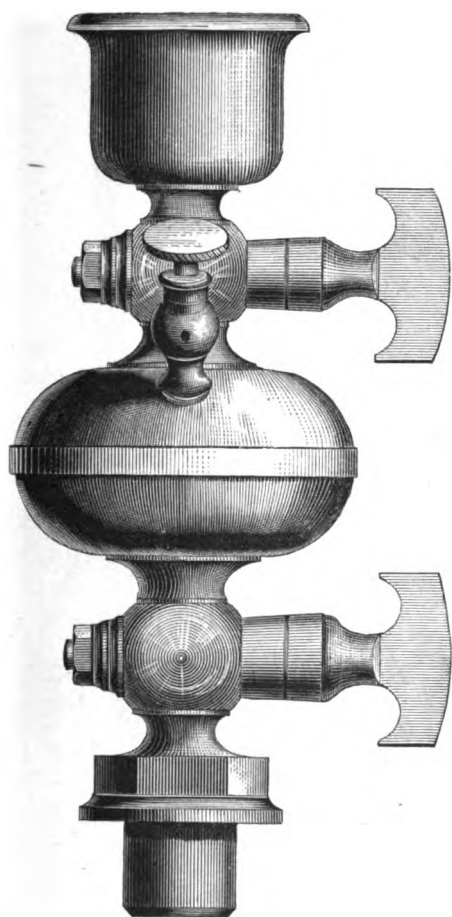
A. CARR, MANUFACTURER, NEW YORK.

GLOBE OIL CUPS, BEST STEAM METAL.

(Full Size)

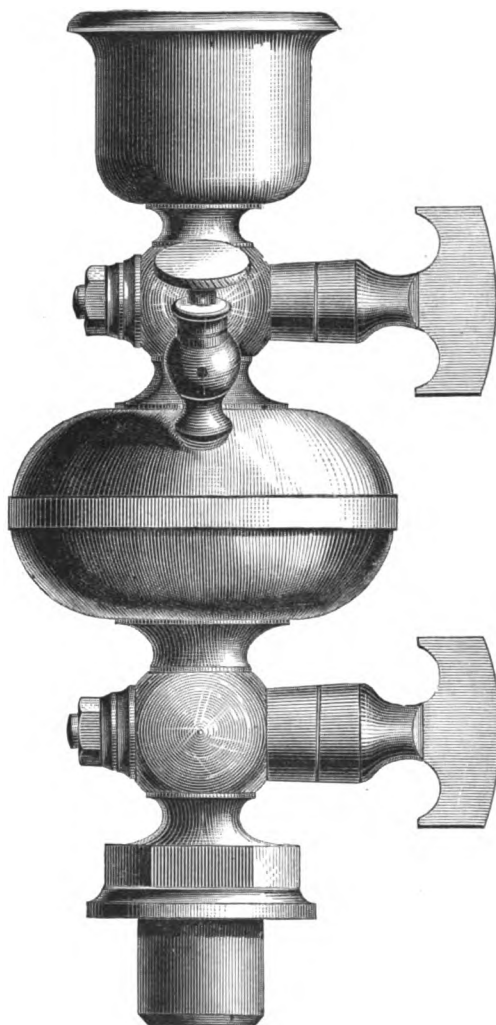
No. 00:

Fig. 7.



No. 0.

Fig. 8.

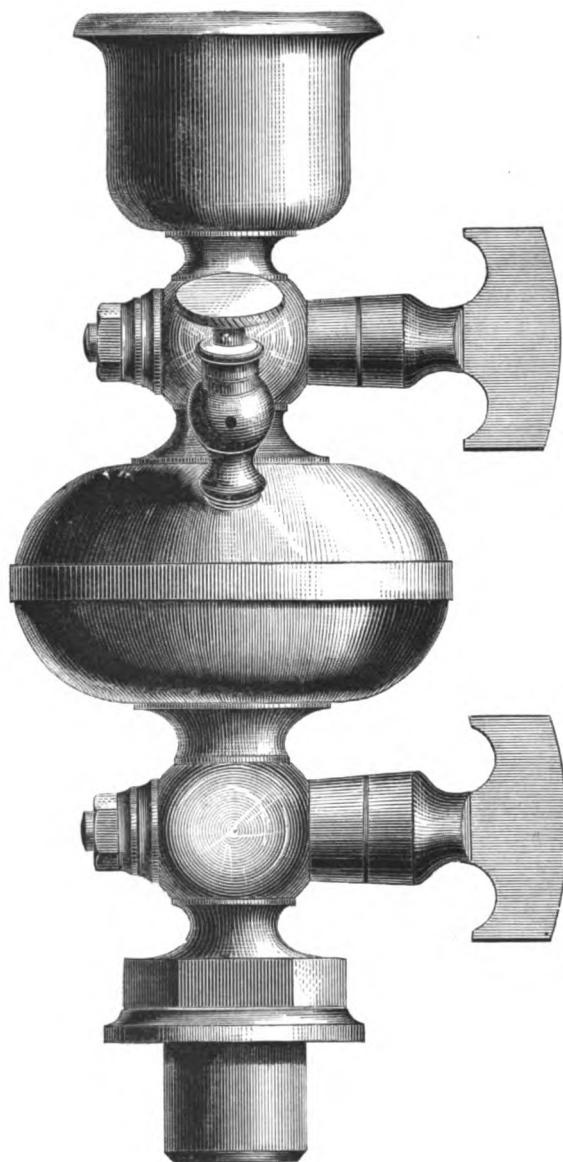


GLOBE OIL CUP, BEST STEAM METAL.

(Full Size.)

No. 1.

Fig. 9.



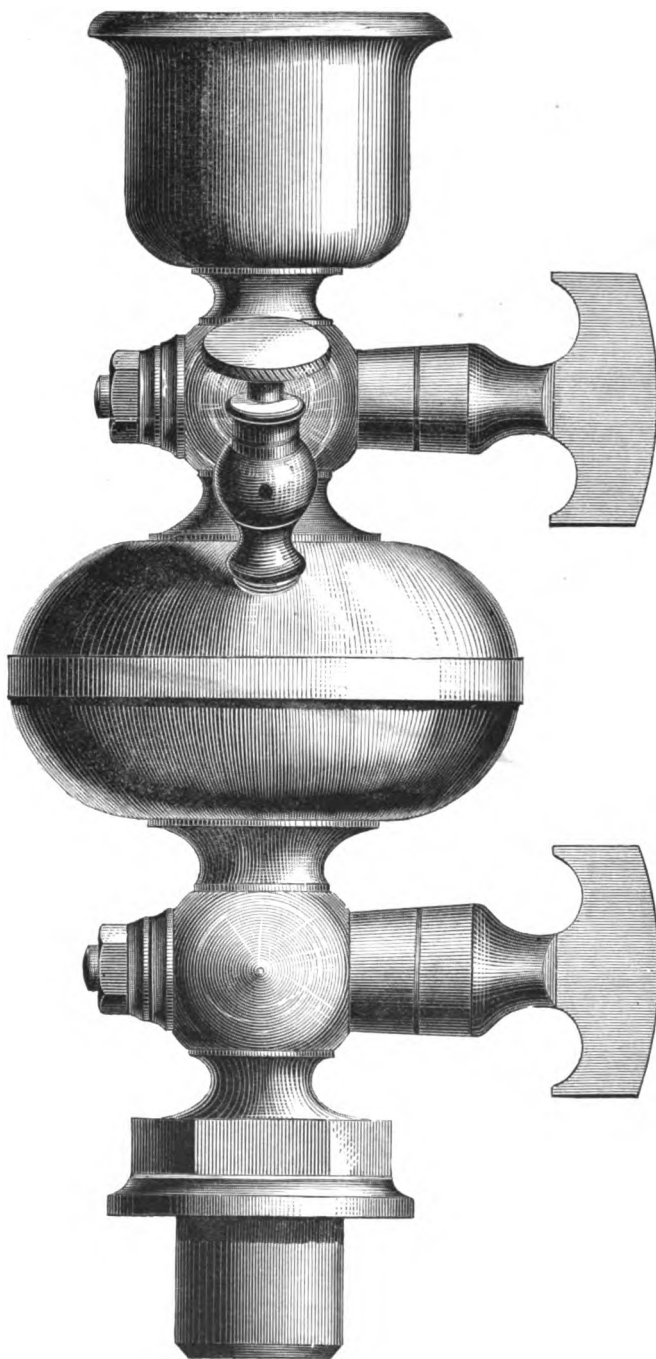
A. CARR, MANUFACTURER, NEW YORK.

GLOBE OIL CUP, BEST STEAM METAL.

(Full Size.)

No. 2.

Fig. 10.

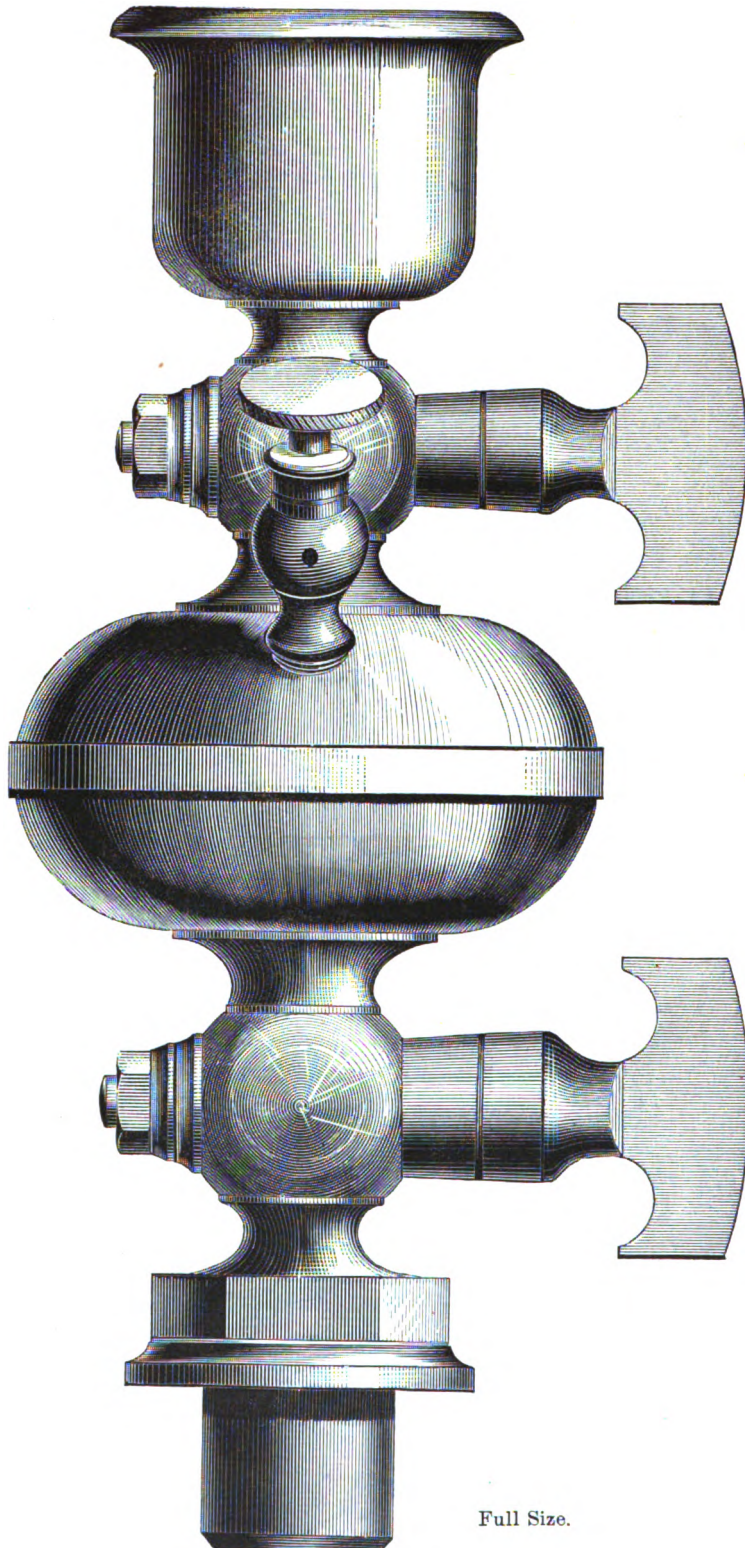


A. CARR, MANUFACTURER, NEW YORK.

GLOBE OIL CUP, BEST STEAM METAL.

No. 8.

Fig. 11.



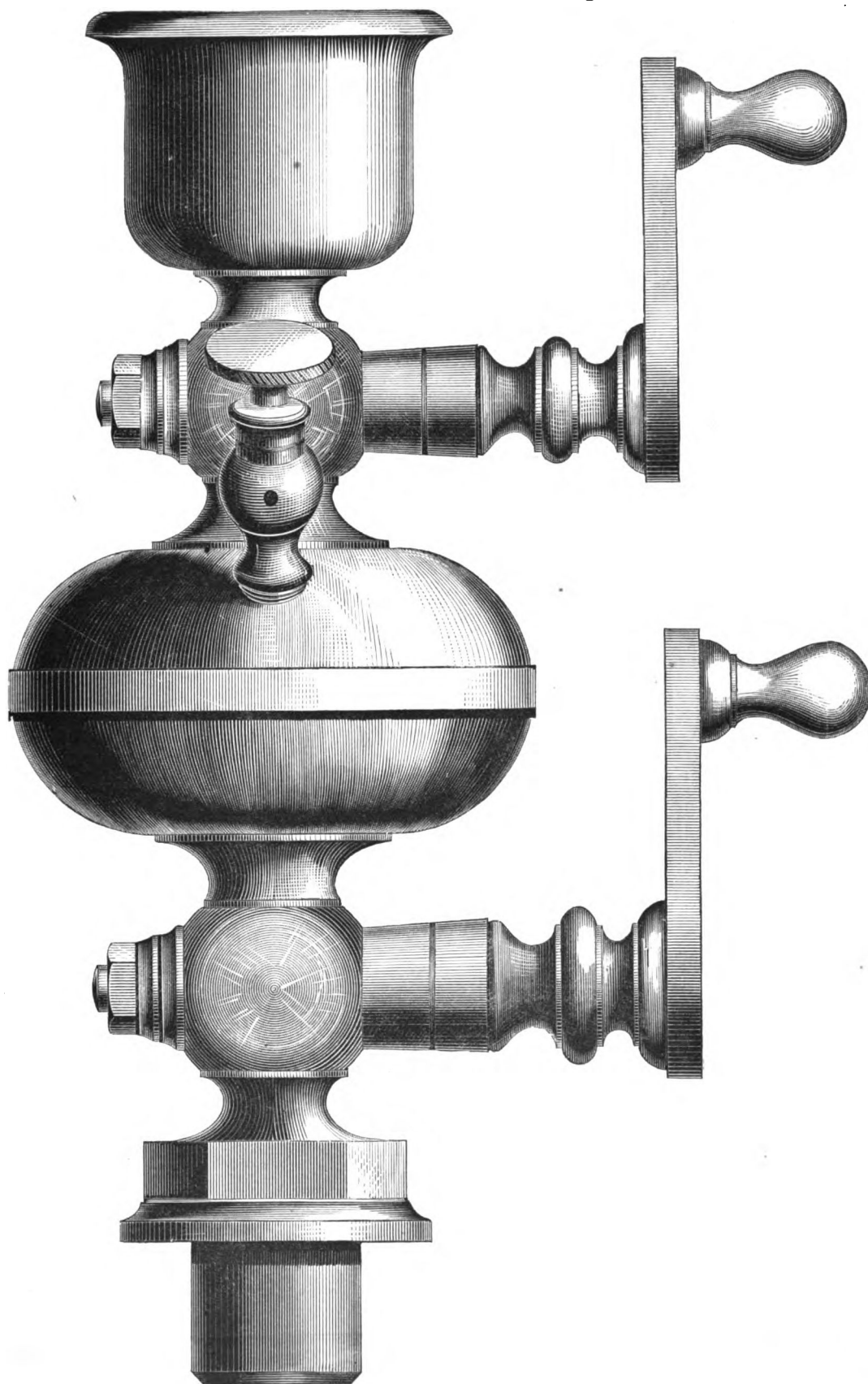
Full Size.

GLOBE OIL CUP, BEST STEAM METAL,

(Full Size.)

No. 4.

Fig. 12.



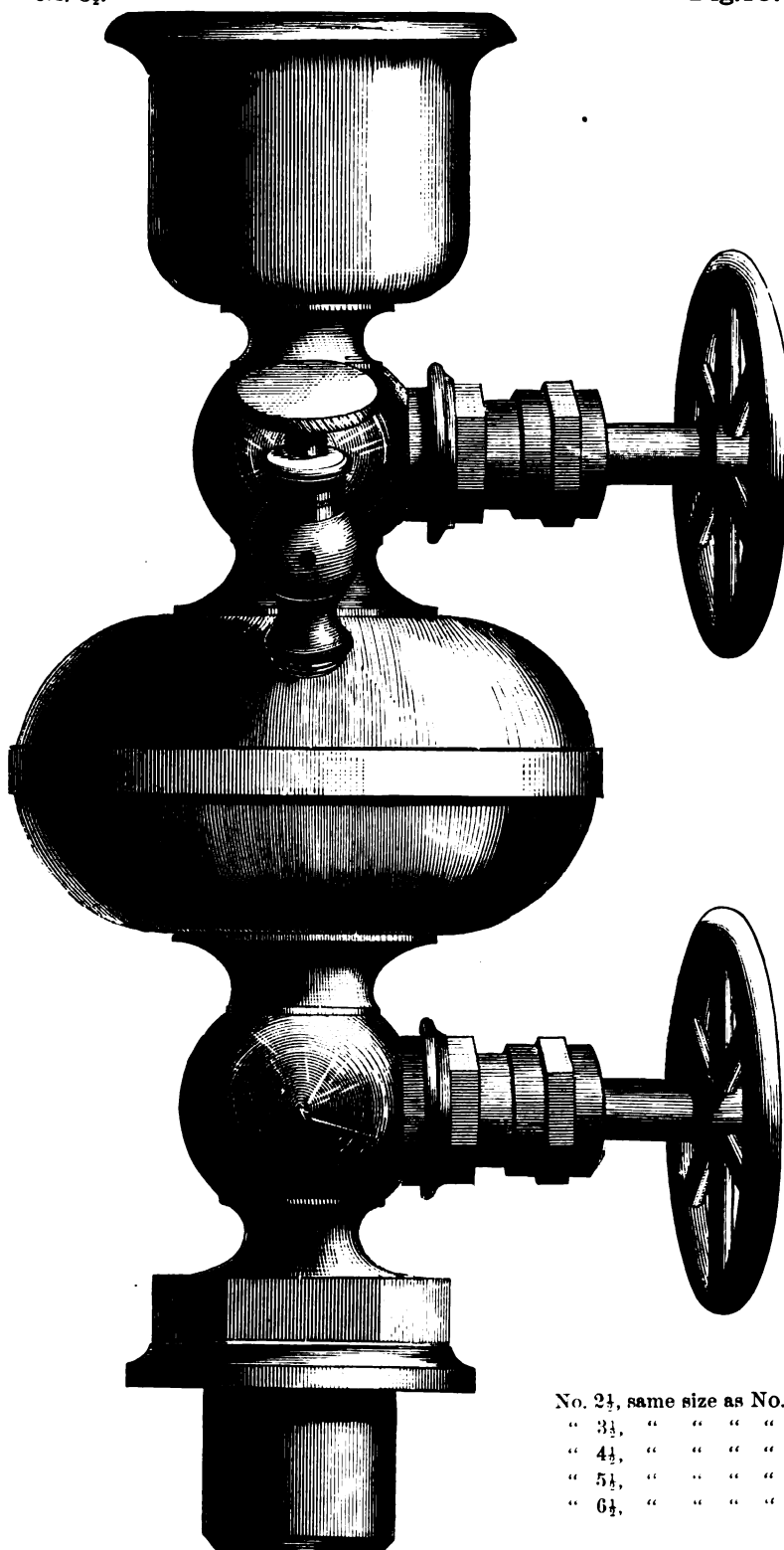
A. CARR, MANUFACTURER, NEW YORK.

GLOBE VALVE OIL CUP, BEST STEAM METAL.

(Full Size.)

No. 8 $\frac{1}{2}$.

Fig. 15.



No. 2 $\frac{1}{2}$, same size as No. 2.
 " 3 $\frac{1}{2}$, " " " " 3.
 " 4 $\frac{1}{2}$, " " " " 4.
 " 5 $\frac{1}{2}$, " " " " 5.
 " 6 $\frac{1}{2}$, " " " " 6.

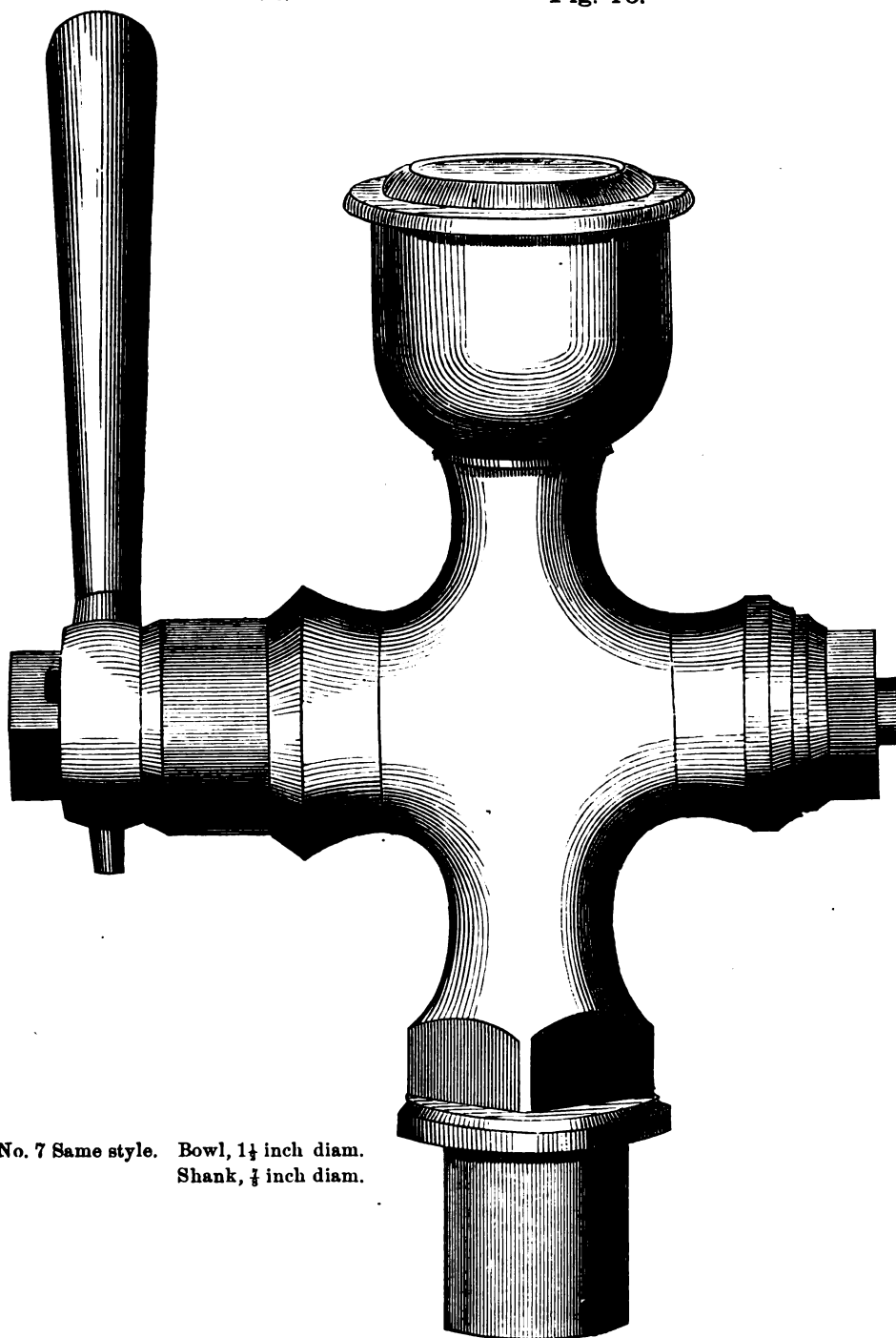
A. CARR, MANUFACTURER, NEW YORK.

HOLLOW PLUG OIL CUP, BEST STEAM METAL.

(Full Size)

No. 8.

Fig. 16.



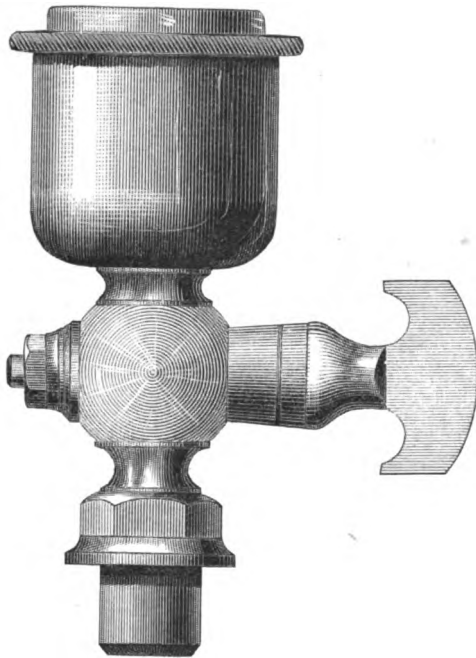
No. 7 Same style. Bowl, $1\frac{1}{4}$ inch diam.
Shank, $\frac{3}{4}$ inch diam.

OIL CUPS WITH STOP COCK, BEST STEAM METAL.

(Full Size.)

No. 9.

Fig. 17.



No. 12.

Fig. 18.

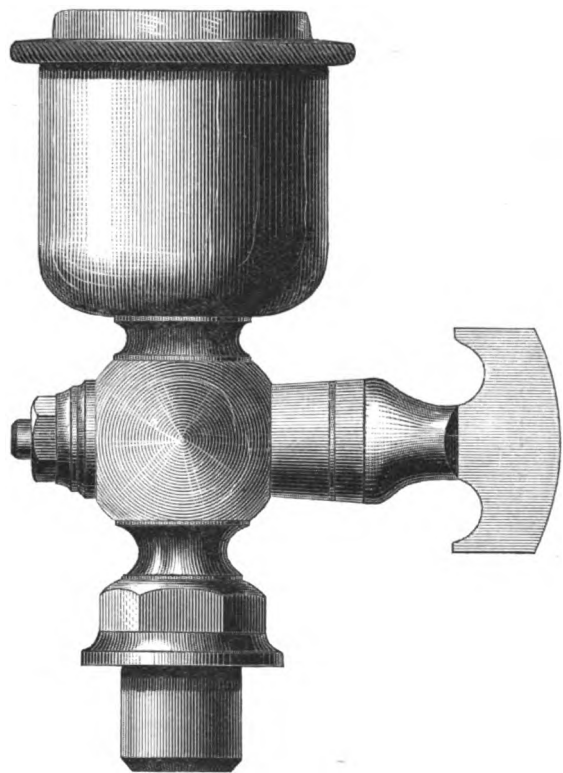
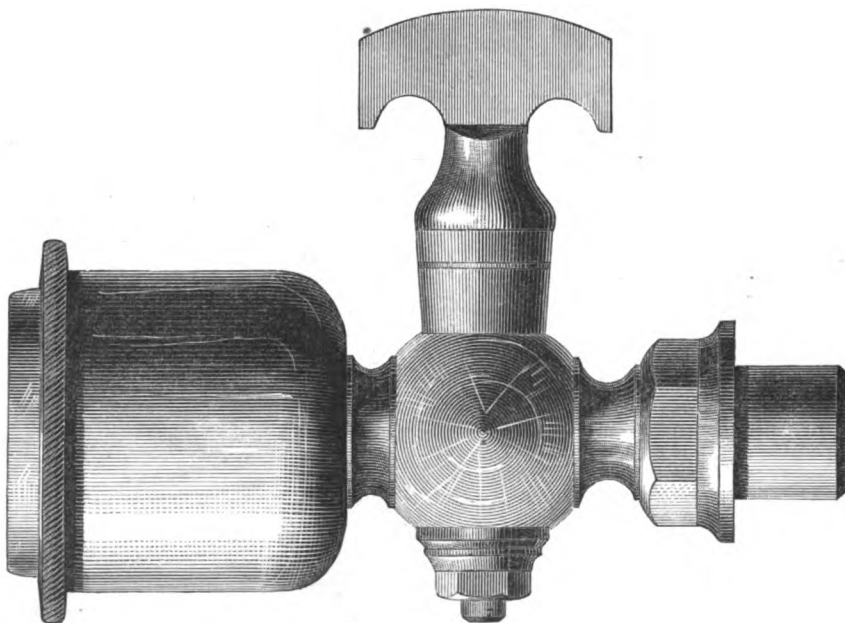


Fig. 19.

No. 11.



A. CARR, MANUFACTURER, NEW YORK.

OIL CUPS WITH STOP COCK, BEST STEAM METAL.

(Full Size.)

No. 12.

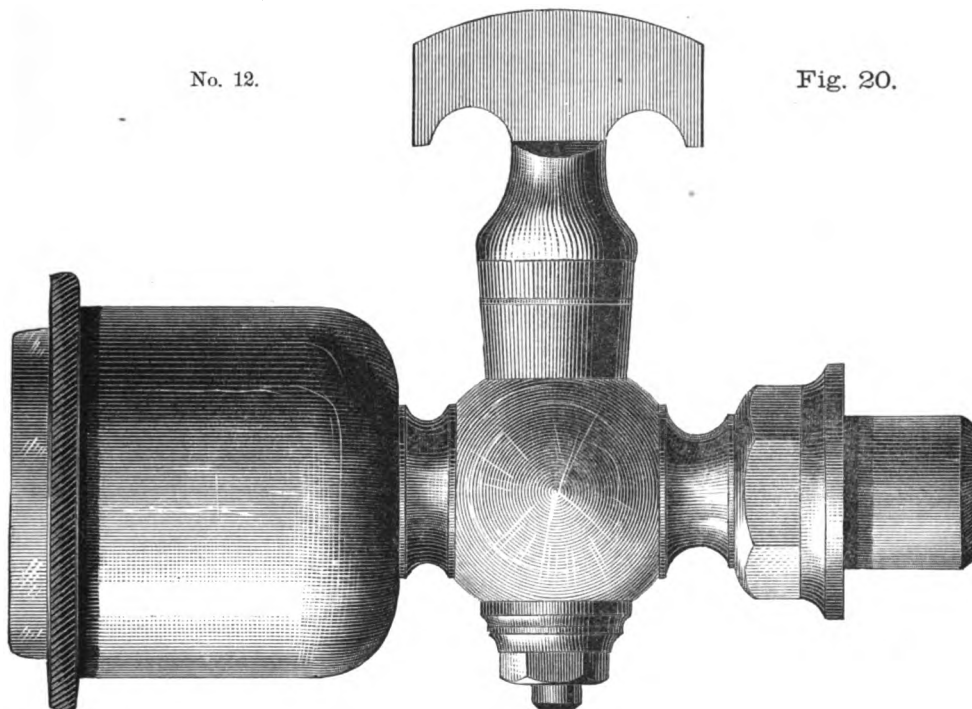


Fig. 20.

No. 13.

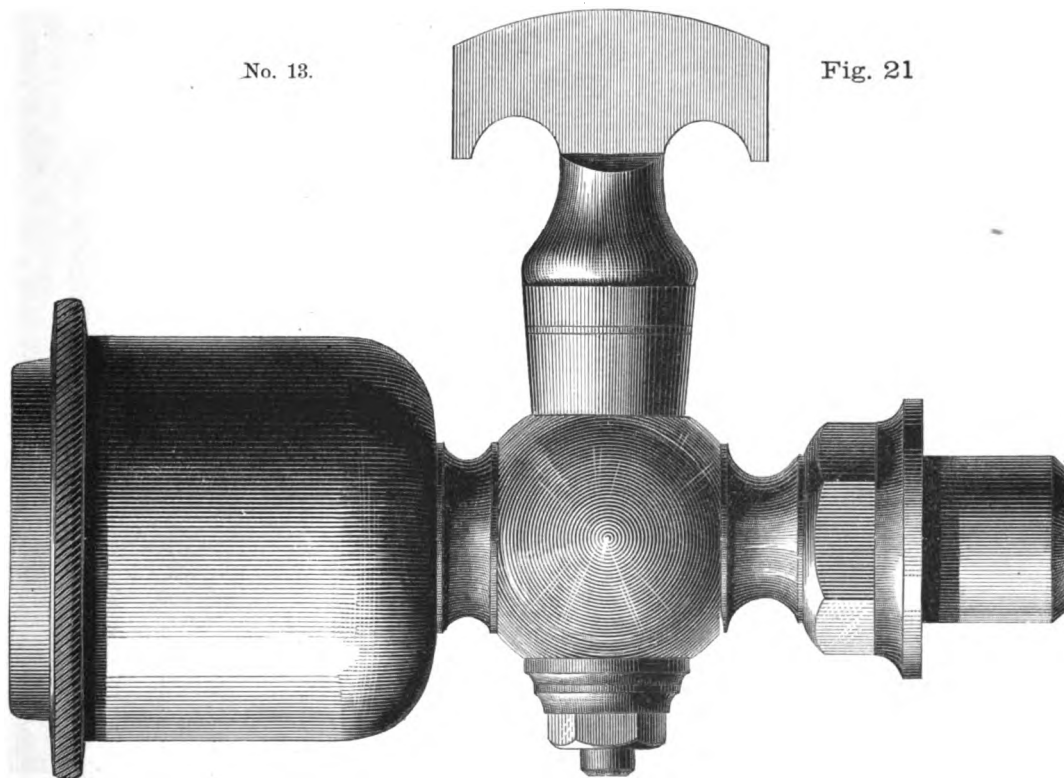


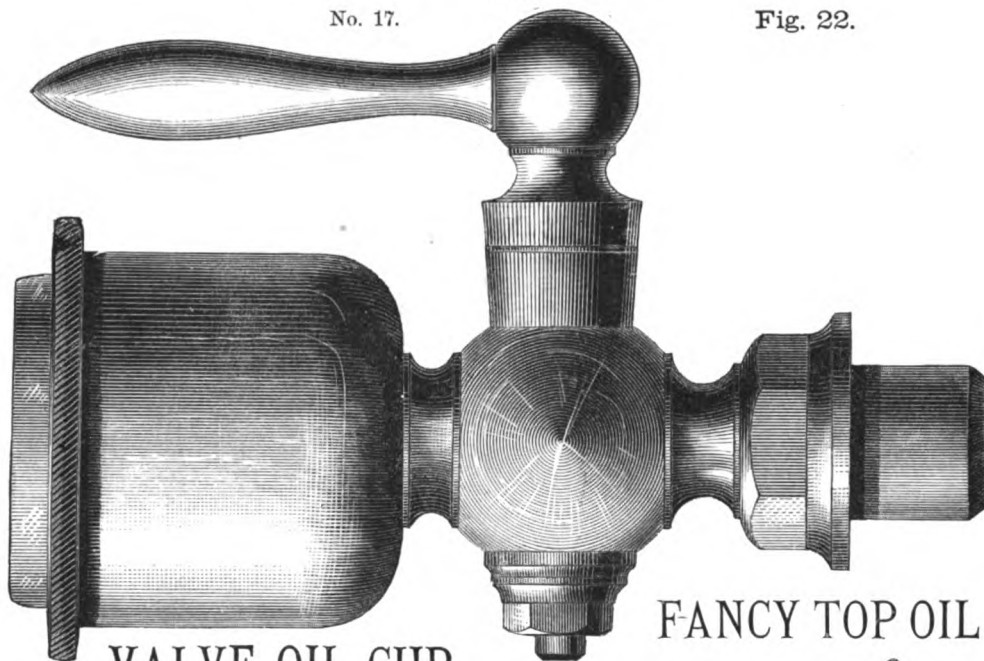
Fig. 21

OIL CUP WITH LEVER HANDLE STOP COCK, BEST STEAM METAL.

(Full Size.)

No. 17.

Fig. 22.

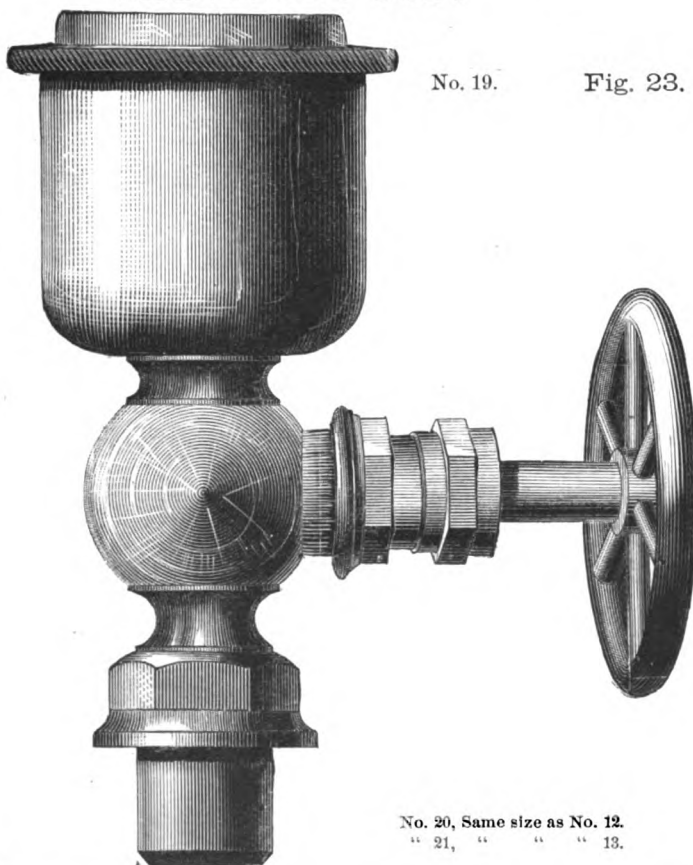


VALVE OIL CUP.

FANCY TOP OIL CUP.

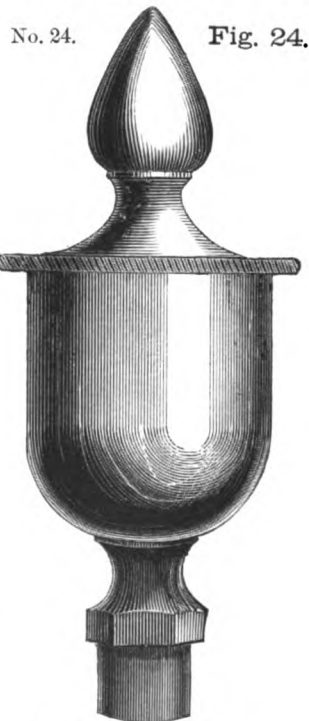
No. 16, Same size as No. 11.
" 18, " " 13.

No. 14, Same size as No. 9.
" 15, " " 10.



No. 19.

Fig. 23.



No. 24.

Fig. 24.

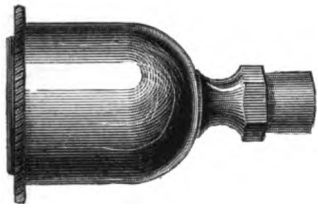
No. 20, Same size as No. 12.
" 21, " " 13.

No. 22, Same size as No. 32.
" 23, " " 33.
" 24, " " 34.
" 25, " " 35.
" 27, " " 37.
" 28, " " 38.
" 29, " " 39.
" 30, " " 40.
" 31, " " 41.

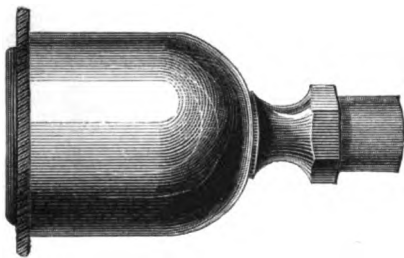
A. CARR, MANUFACTURER, NEW YORK.

PLAIN OIL CUPS, BEST STEAM METAL.

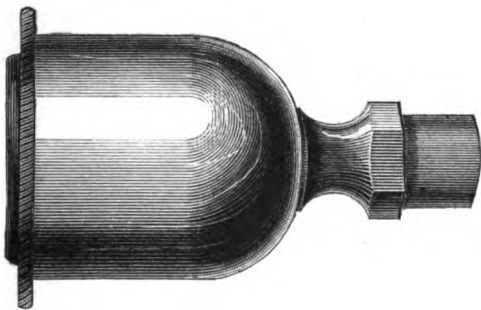
No. 32. Fig. 24.



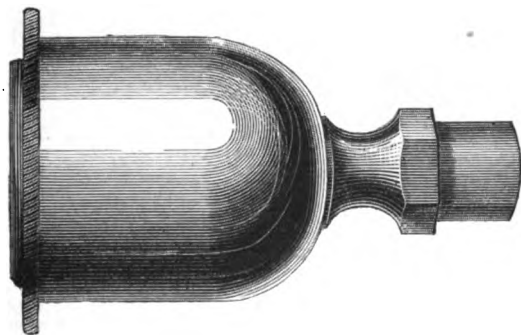
No. 33. Fig. 25.



No. 34. Fig. 26.



No. 35. Fig. 27.



No. 36.

Fig. 28.



No. 37.

Fig. 29.



PLAIN OIL CUPS, BEST STEAM METAL.

(Full Size.)

No. 39.

Fig. 31.

No. 38.

Fig. 30.

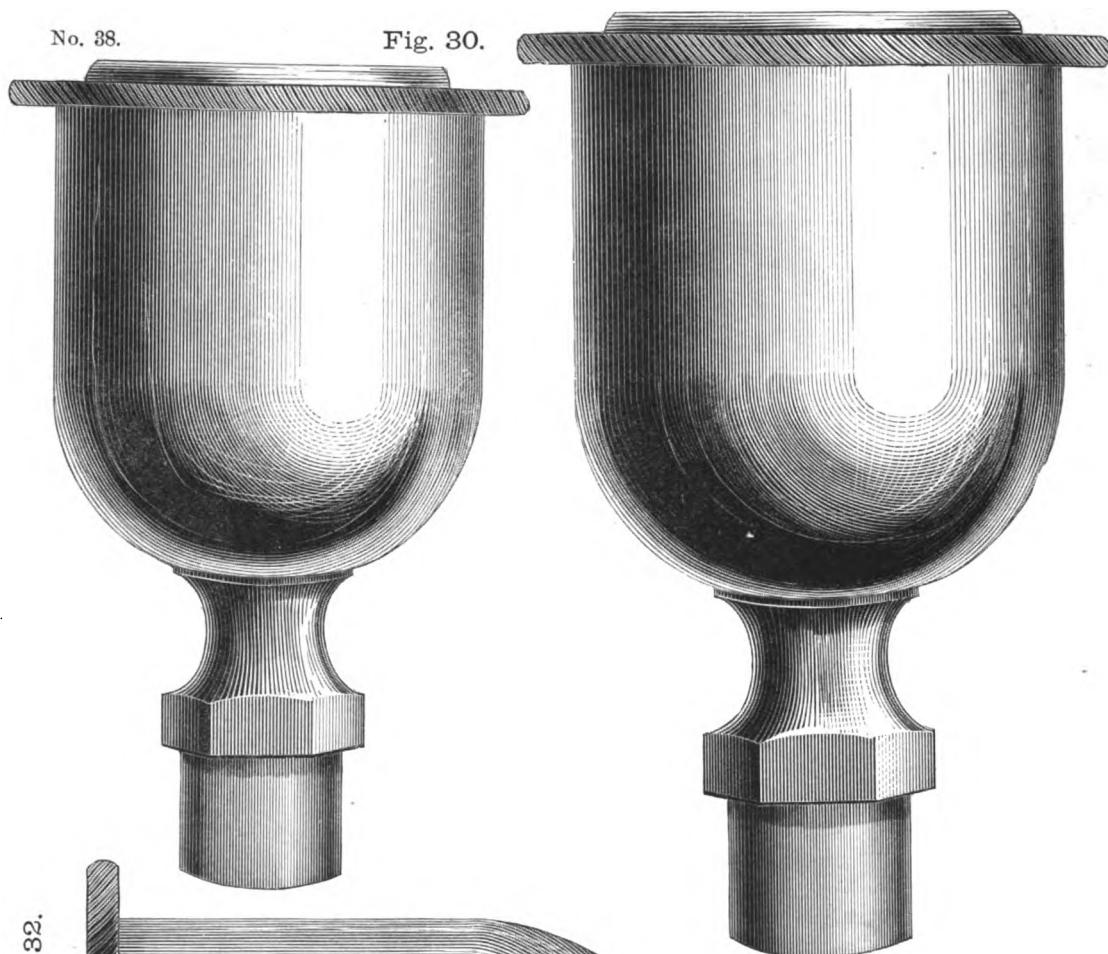
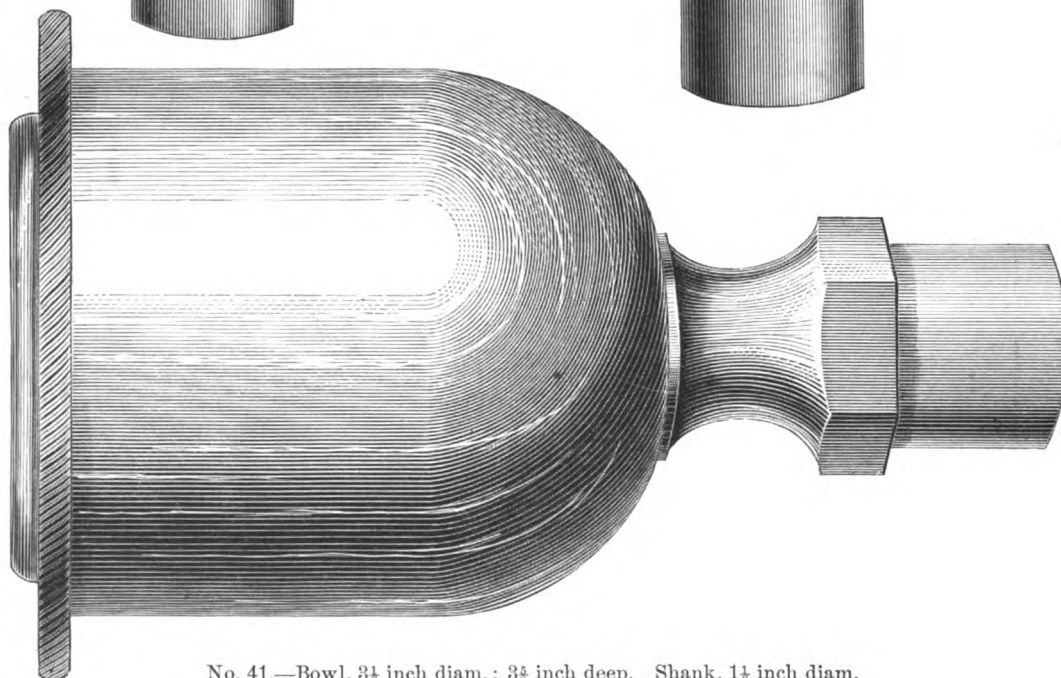


Fig. 32.

No. 40.



No. 41.—Bowl, $3\frac{1}{2}$ inch diam. ; $3\frac{3}{4}$ inch deep. Shank, $1\frac{1}{2}$ inch diam.

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OCTAGON OIL CUPS, BEST STEAM METAL.

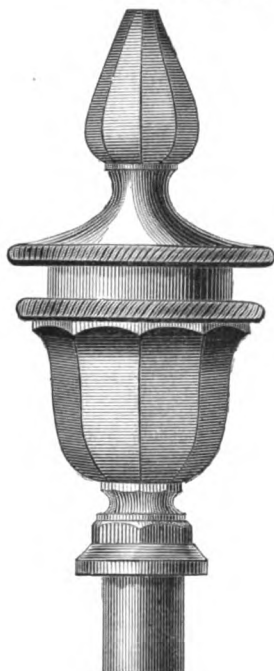
No. 42.

Fig. 33.



No. 43.

Fig. 34.



No. 44.

Fig. 35.

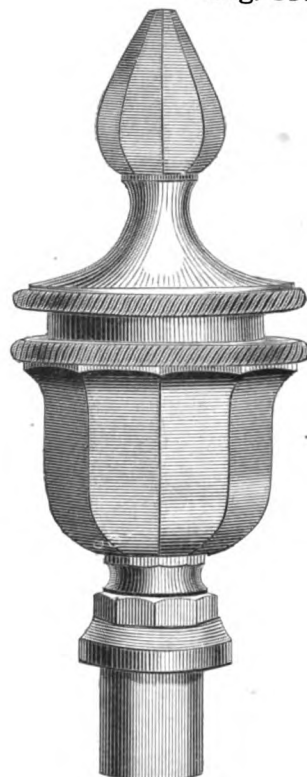
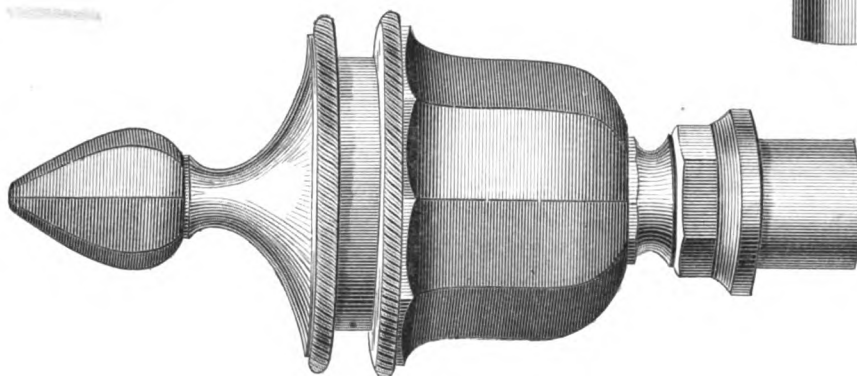
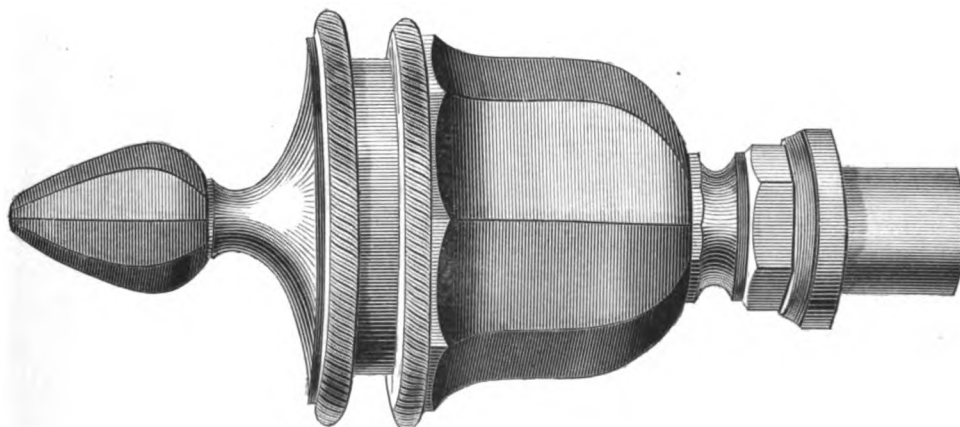


Fig. 36.



No. 45.

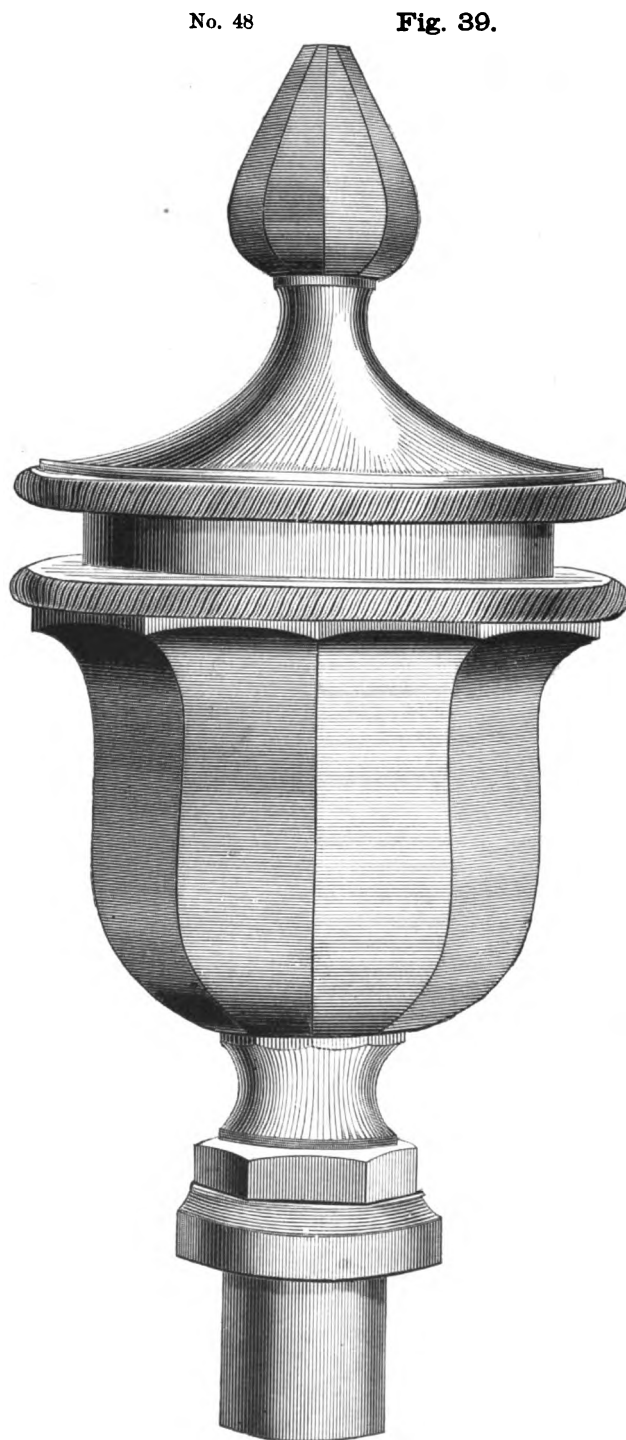
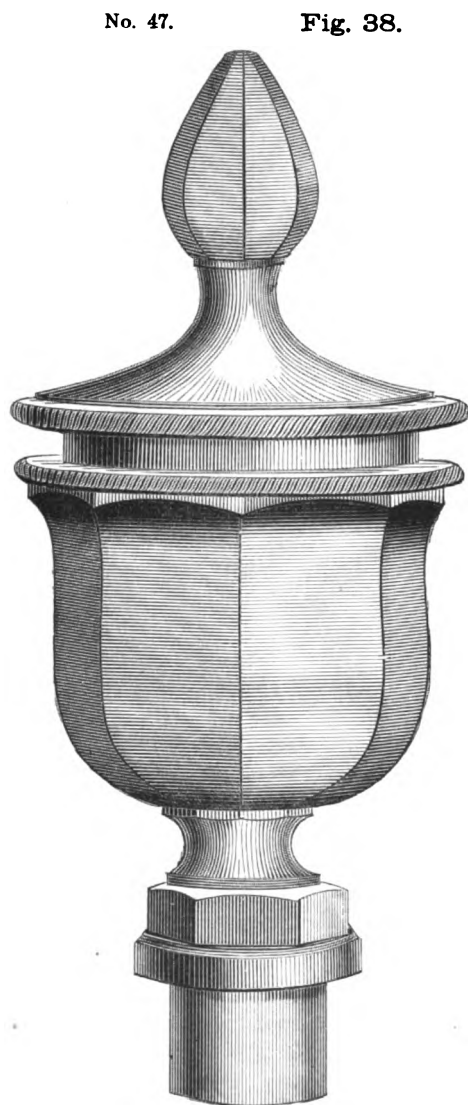
Fig. 37.



No. 46.

OCTAGON OIL CUPS, BEST STEAM METAL.

(Full Size.)



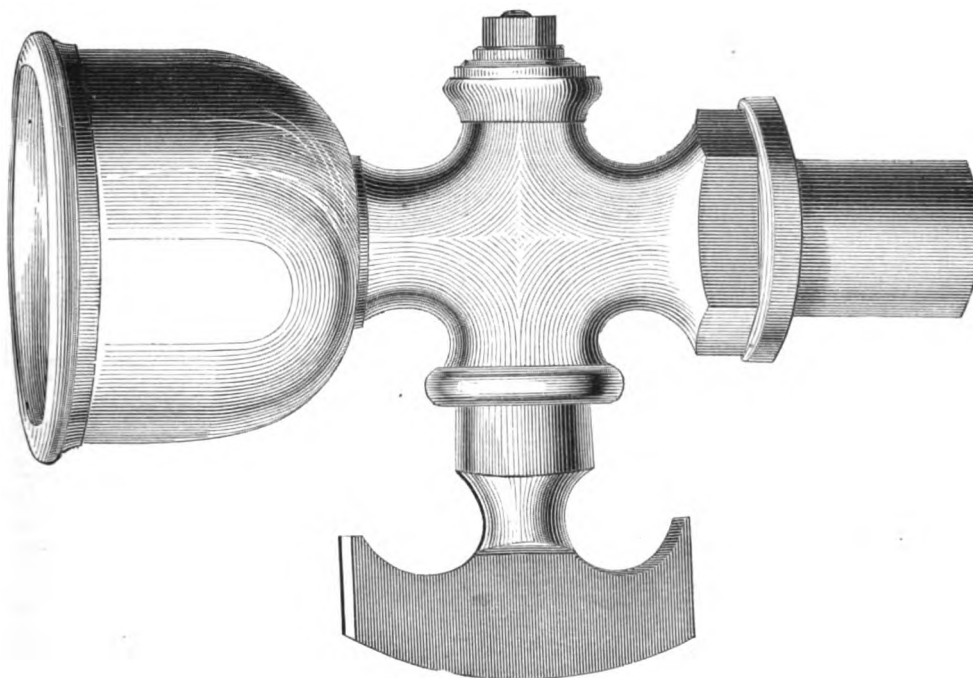
A. CARR, MANUFACTURER, NEW YORK.

OPEN TOP TALLOW CUP, BEST STEAM METAL.

(Full Size.)

No. 51.

Fig. 40.

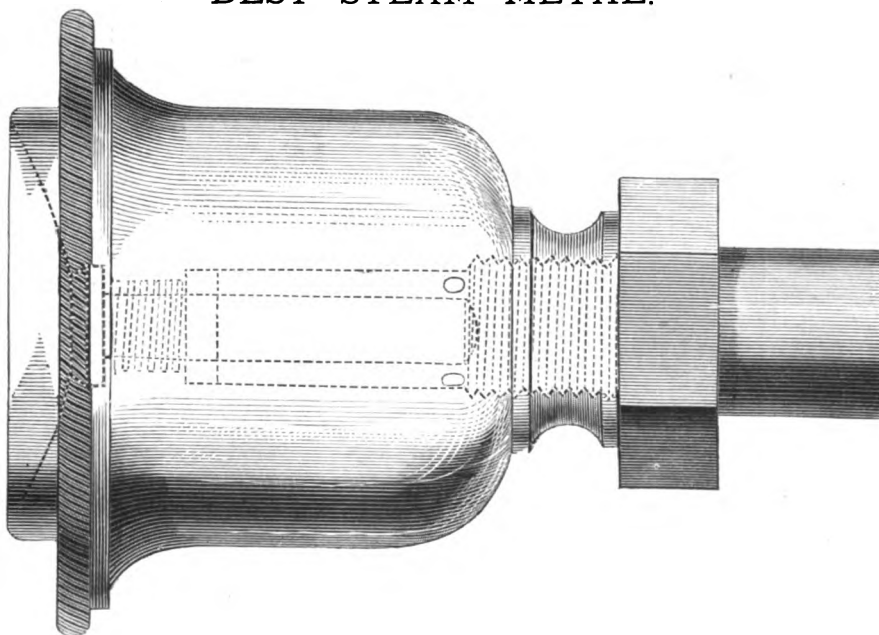


No. 52 Same Cup with Lever Handle.

Steam Chest Oil Cup, with Valve, BEST STEAM METAL.

Fig. 41.

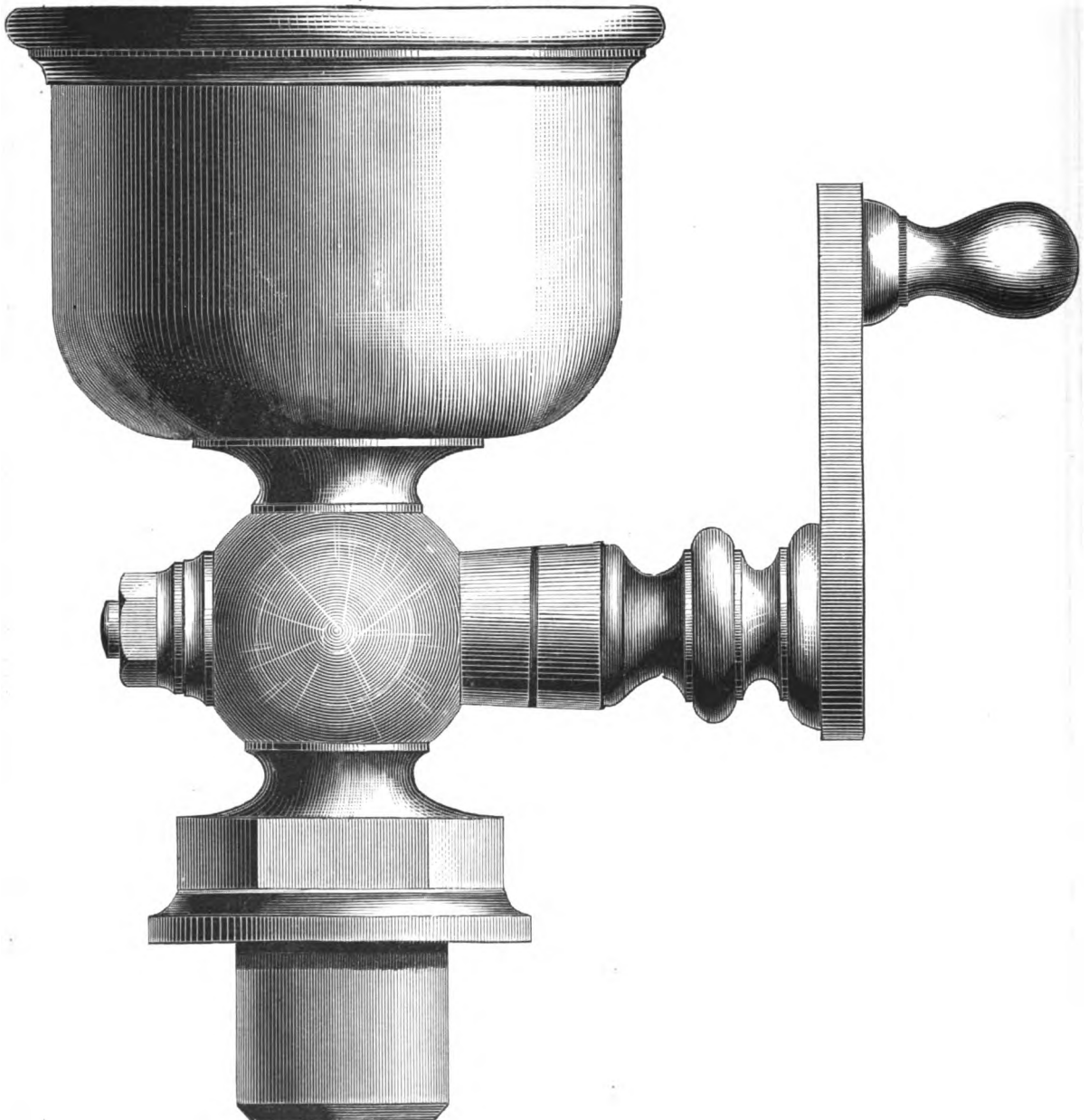
No. 53.



TALLOW CUP, BEST STEAM METAL.

No. 54.

Fig. 42.

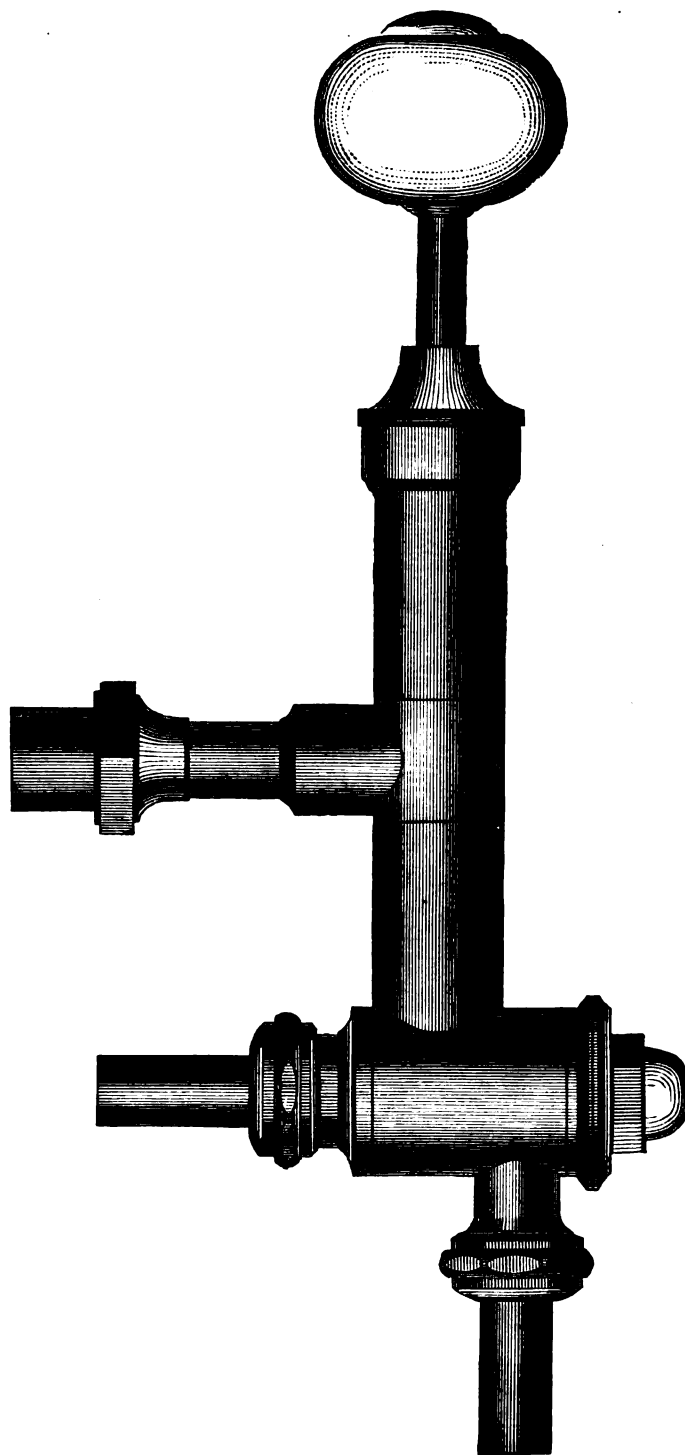


A. CARR, MANUFACTURER, NEW YORK.

No. 55 Same style. Bowl, $4\frac{1}{2}$ inch diam., 3 inch deep; Shank, $1\frac{1}{2}$ inch diam.

OIL PUMP FOR STEAM CHEST, BEST STEAM METAL.

Fig. 53.

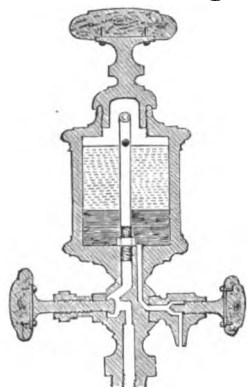


LOCOMOTIVE STEAM CHEST OIL CUPS,

NATHAN & DREYFUS PATENT.

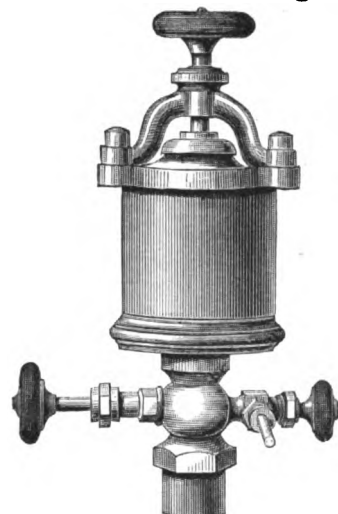
Plain.

Fig. 46.



Yoke.

Fig. 47.



Plain, Nos. 1, 1½, 2, 2½, 3, 4, 5, 6, 7.
Yoke, 3, 4, 5, 6, 7.

LOCOMOTIVE OIL CUPS,

FOR CONNECTING RODS, SLIDES, ECCENTRICS, ETC.

A.

Fig. 48.

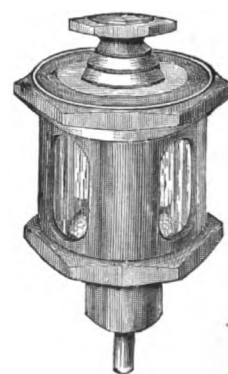


Fig. 49.



No. 42.

Fig. 50.



SHELL CASED.

	Capacity.	Diameter.	Height.
A, - -	¾ oz.	1½ in.	2½ in.
B, - -	1½ "	2½ "	3½ "
C, - -	3 "	2½ "	4½ "
D, - -	8 "	3½ "	5½ "

No.	Capacity.	Diameter.	Height.
21, - - - - -	½ oz.	1½ in.	2½ in.
" 28, - - - - -	1 "	1½ "	2½ "
" 36, - - - - -	1 "	2 "	3½ "
" 42, - - - - -	1½ "	2 "	4 "
" 60, - - - - -	2½ "	2½ "	4½ "
" 72, - - - - -	2 "	3 "	4½ "
" 100, - - - - -	1 qt.	10½ "	16½ "

GLASS OIL CUPS FOR SHAFTING, &C.

No. 9. Fig. 51.



	Capacity.	Diameter.	Height.
No. 0—For Cards, Looms, Lathes, or for small Journals,	1 oz.	2 in.	2 1/4 in.
No. 00—For Card Cylinders, Strippers, and Compact connection,	1/4 " "	1 1/4 " "	2 1/4 " "
No. 3—Ditto, to fill from top,	1/4 " "	1 1/4 " "	2 1/4 " "
No. 9—For Shafting, Pickers, Looms and Fans,	1 1/4 " "	2 1/4 " "	3 1/4 " "
No. 9—W. B.—For Compact Shafting or Connections,	1 1/4 " "	1 1/4 " "	3 1/4 " "
No. 10—For Shafting, Pickers, Looms and Fans,	3 1/4 " "	2 1/4 " "	4 1/4 " "
No. 10—W. B.—For Compact Shafting or Connections,	3 " "	2 " "	4 1/4 " "
No. 11—For Shafting, or Connections, where the Cups are required to be screwed in,	1 1/4 " "	2 1/4 " "	3 1/4 " "
No. 12—	3 1/4 " "	2 1/4 " "	4 1/4 " "
No. 13—To fill from top,	1 1/4 " "	2 1/4 " "	3 1/4 " "
No. 13—W. B.—Ditto, ditto,	1 1/4 " "	1 1/4 " "	3 1/4 " "
No. 14—Ditto, ditto,	3 1/4 " "	2 1/4 " "	4 1/4 " "
No. 15—For Engines, or Connections, to be filled from Top,	3 1/4 " "	2 1/4 " "	4 1/4 " "
No. 18—For Upright Shafts, to order,	3 1/4 " "	2 1/4 " "	4 1/4 " "
No. 23—For Small Engines, Connections, or Lathes,	1/4 " "	1 1/4 " "	2 1/4 " "
No. 24—For Engines,	2 1/4 " "	2 1/4 " "	3 1/4 " "
No. 25—For Heavy Bearings or Pillar Blocks,	8 " "	3 " "	4 1/4 " "

No. 10. Fig. 52.

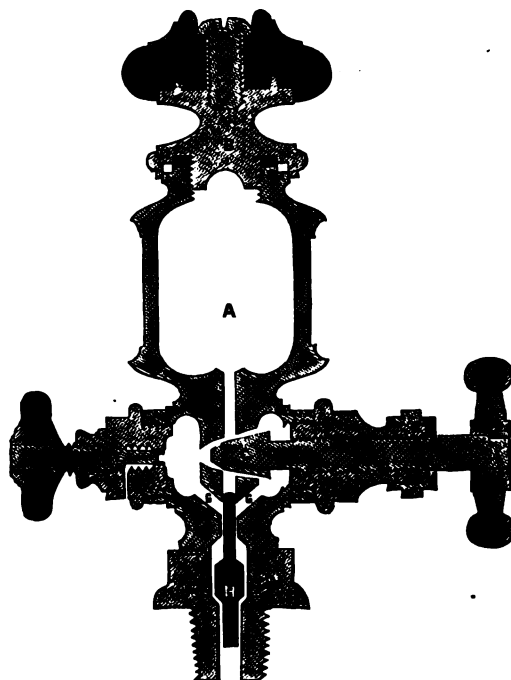
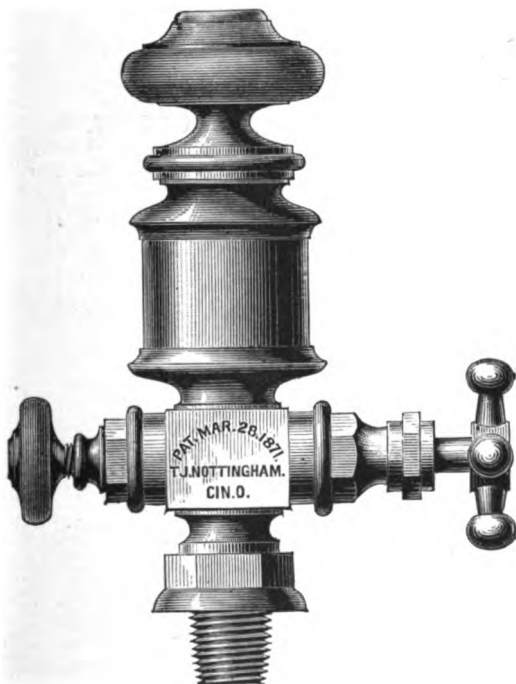


LOOSE PULLEY CUPS, WITH HOLLOW WIRES.

	Capacity.	Diameter.	Height.
No. 22,	1/4 oz.	1 1/4 in.	2 1/4 in.
No. 23,	1/4 " "	1 1/4 " "	1 1/4 " "

THE NOTTINGHAM LUBRICATOR, WITH DRAIN COCK.

Fig. 52t.



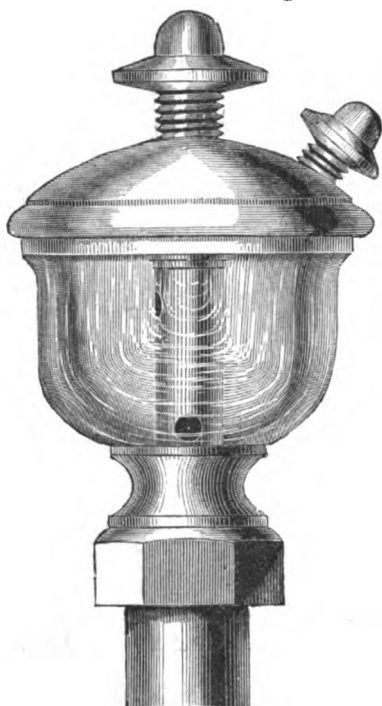
No.	00.	0.	1.	2.	3.	4.
Capacity,	1/4 pint.	1/2 pint.	1 pint.	2 pint.	3 pint.	4 pint.
Size, Diameter in inches,	1 1/4	2	2 1/4	2 3/4	3 1/4	4

BROUGHTON'S PATENT OIL CUPS.

STEAM CHEST CUP.

No. 1.

Fig. 43.



No. 0—Cup, $1\frac{1}{2}$ inch diam., $2\frac{1}{4}$ inch high.
 " 2— " 2 " " $3\frac{1}{4}$ " "
 " 3— " $2\frac{1}{2}$ " " $4\frac{1}{4}$ " "

Fig. 44.

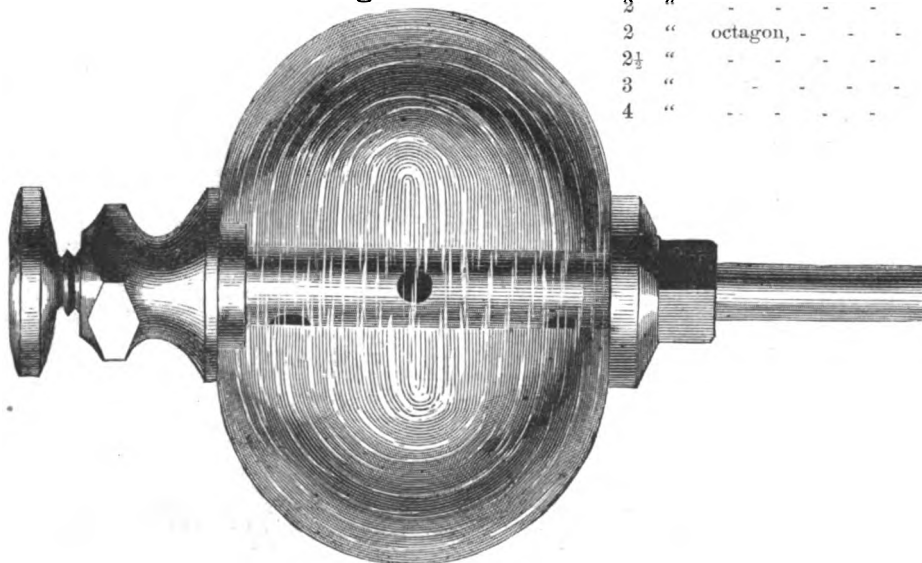


FOR TALLOW OR SUET.

Size.	Capacity.
$1\frac{1}{2}$ inch.,	holds 2 oz.
2 " "	" $3\frac{1}{2}$ "
2 " octagon, -	" $4\frac{1}{2}$ "
$2\frac{1}{2}$ " "	" $6\frac{1}{2}$ "
3 " "	" 11 "
4 " "	" 22 "

No. 3.

Fig. 45.



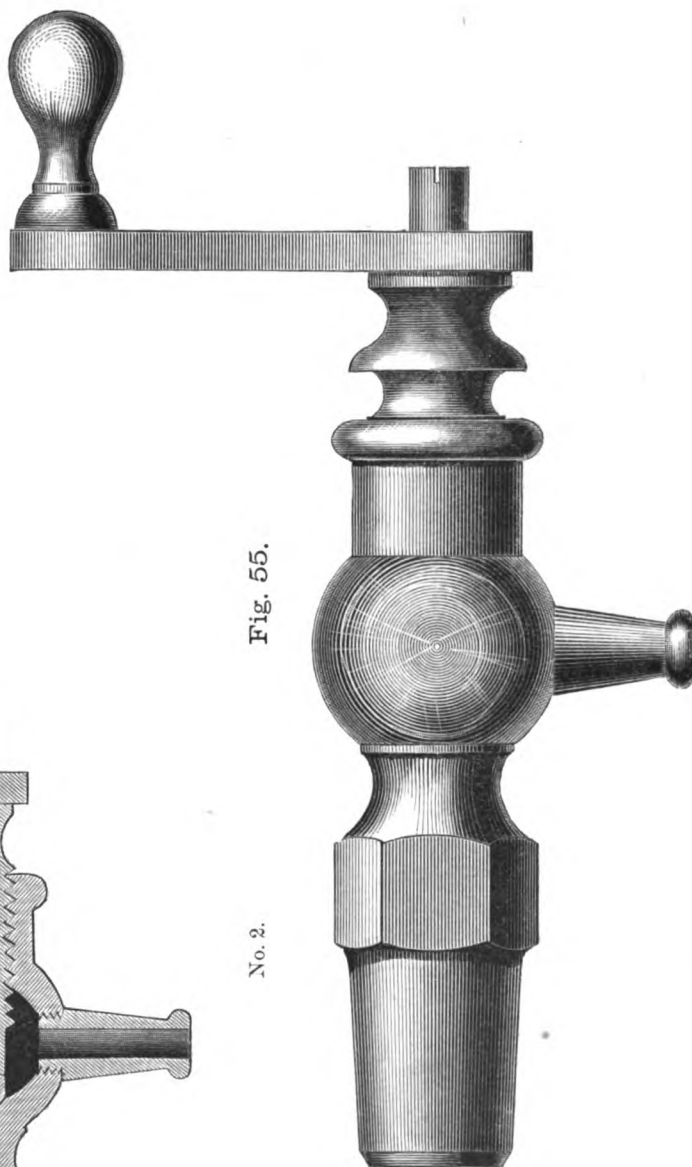
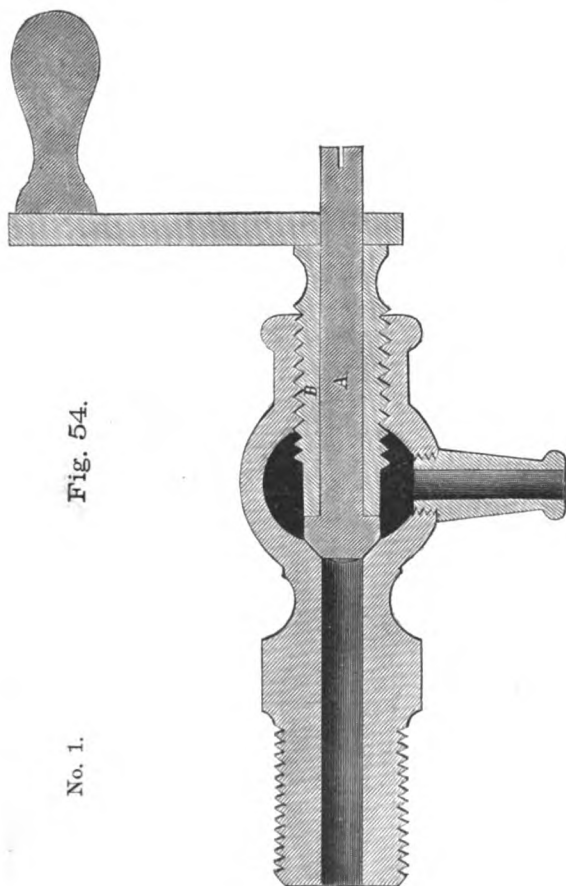
GRADUATING OIL CUP.

Nos. 1 and 2, Smaller Sizes.

A. CARR, MANUFACTURER, NEW YORK.

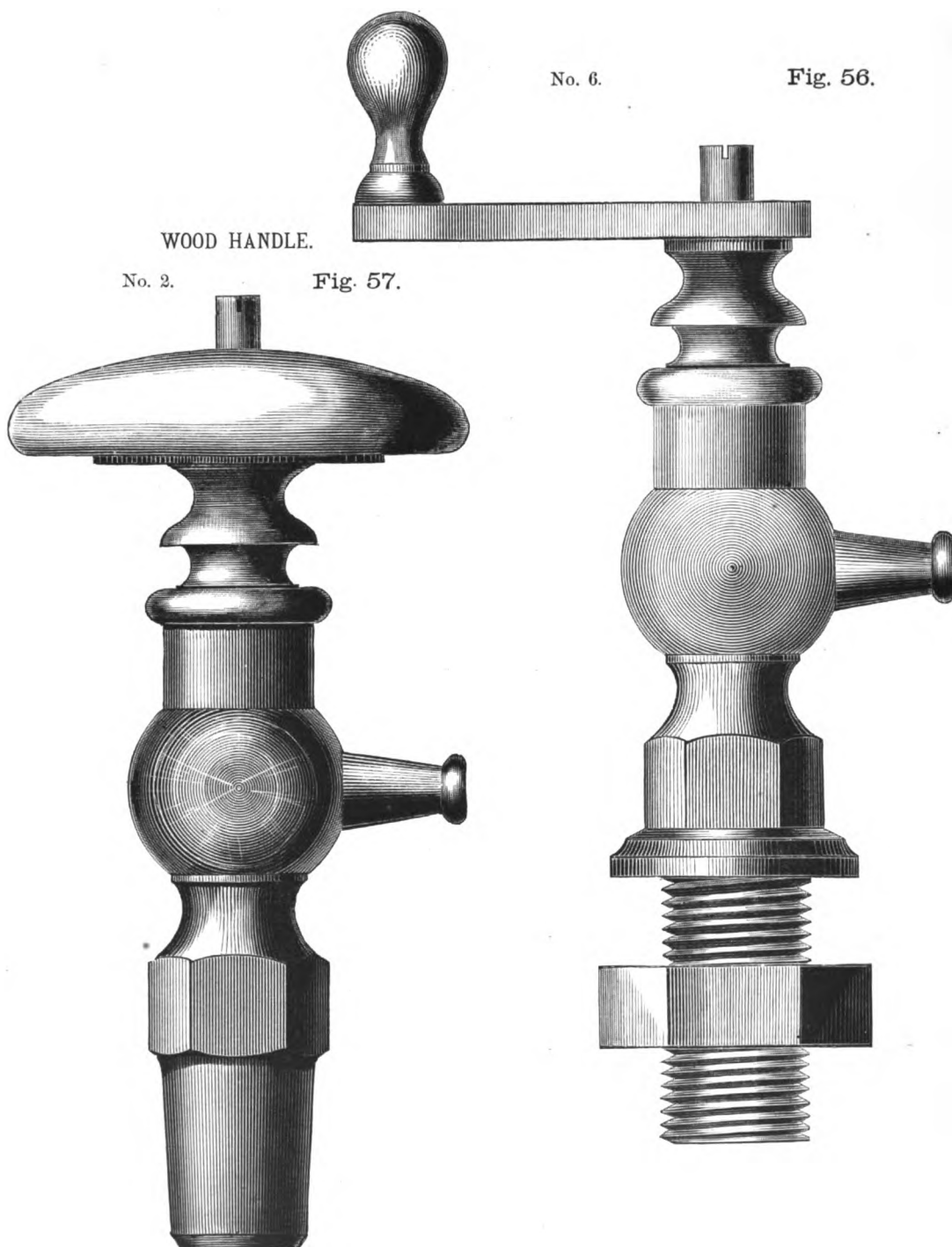
GAUGE COCKS, BEST STEAM METAL,

(Full Size.)



GAUGE COCKS, BEST STEAM METAL.

(Full Size.)



No. 6, 1½ inch Shank, Screw and Nut.

" 7, 2¼ " " "

" 8, 3 " " "

A. CARR, MANUFACTURER, NEW YORK.

GAUGE COCKS, BEST STEAM METAL.

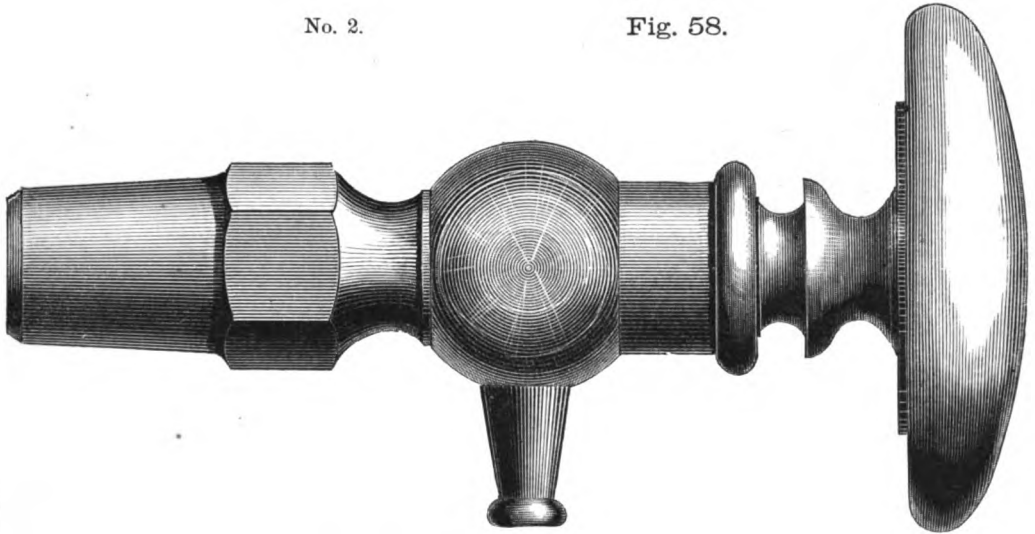
(Full Size)

WITH BABBIT METAL, OR RUBBER SEAT.

WOOD OR LEVER HANDLE.

No. 2.

Fig. 58.

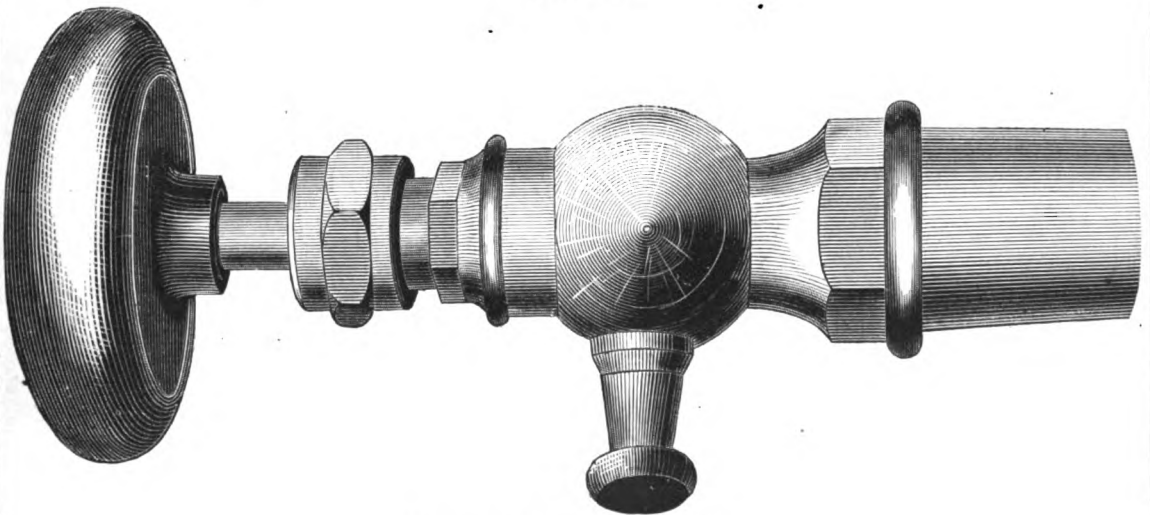


No. 2 will Screw for $\frac{1}{4}$ inch pipe.

" 3 " " $\frac{1}{2}$ "

WITH PACKING BOX.

Fig. 59.

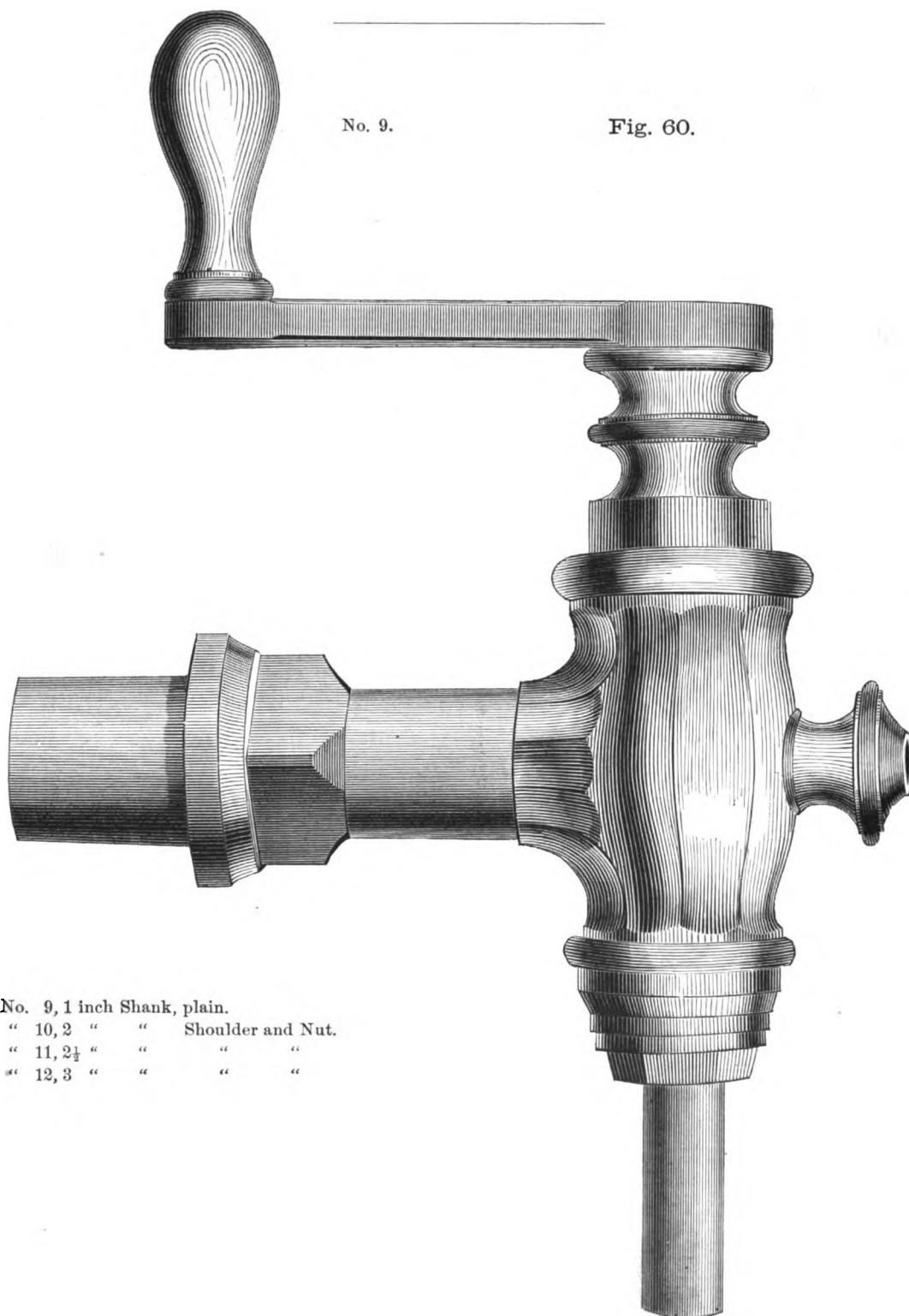


No. 2 will Screw for $\frac{1}{4}$ inch pipe.

" 3 " " $\frac{1}{2}$ "

OCTAGON GAUGE COCK, BEST STEAM METAL.

(Full Size.)



No. 9.

Fig. 60.

No. 9, 1 inch Shank, plain.

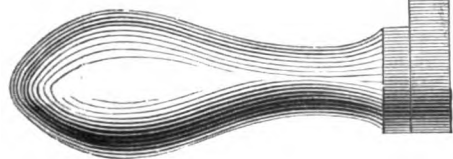
- | | | | |
|----------|---|---|-------------------|
| " 10, 2 | " | " | Shoulder and Nut. |
| " 11, 2½ | " | " | " |
| " 12, 3 | " | " | " |

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CUBA PATTERN GAUGE COCKS,

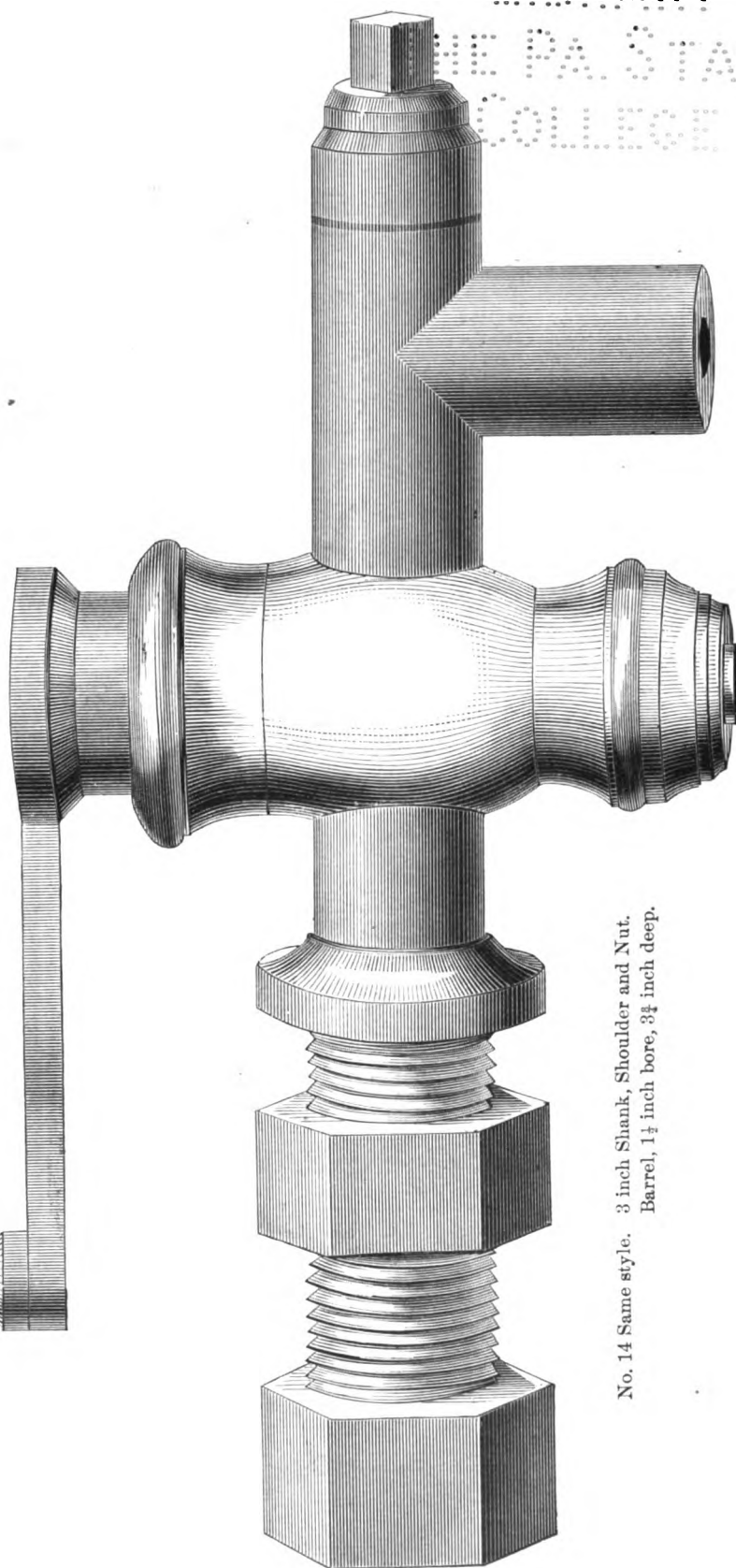
BEST STEAM METAL.



No. 13.

(Full Size.)

Fig. 61.



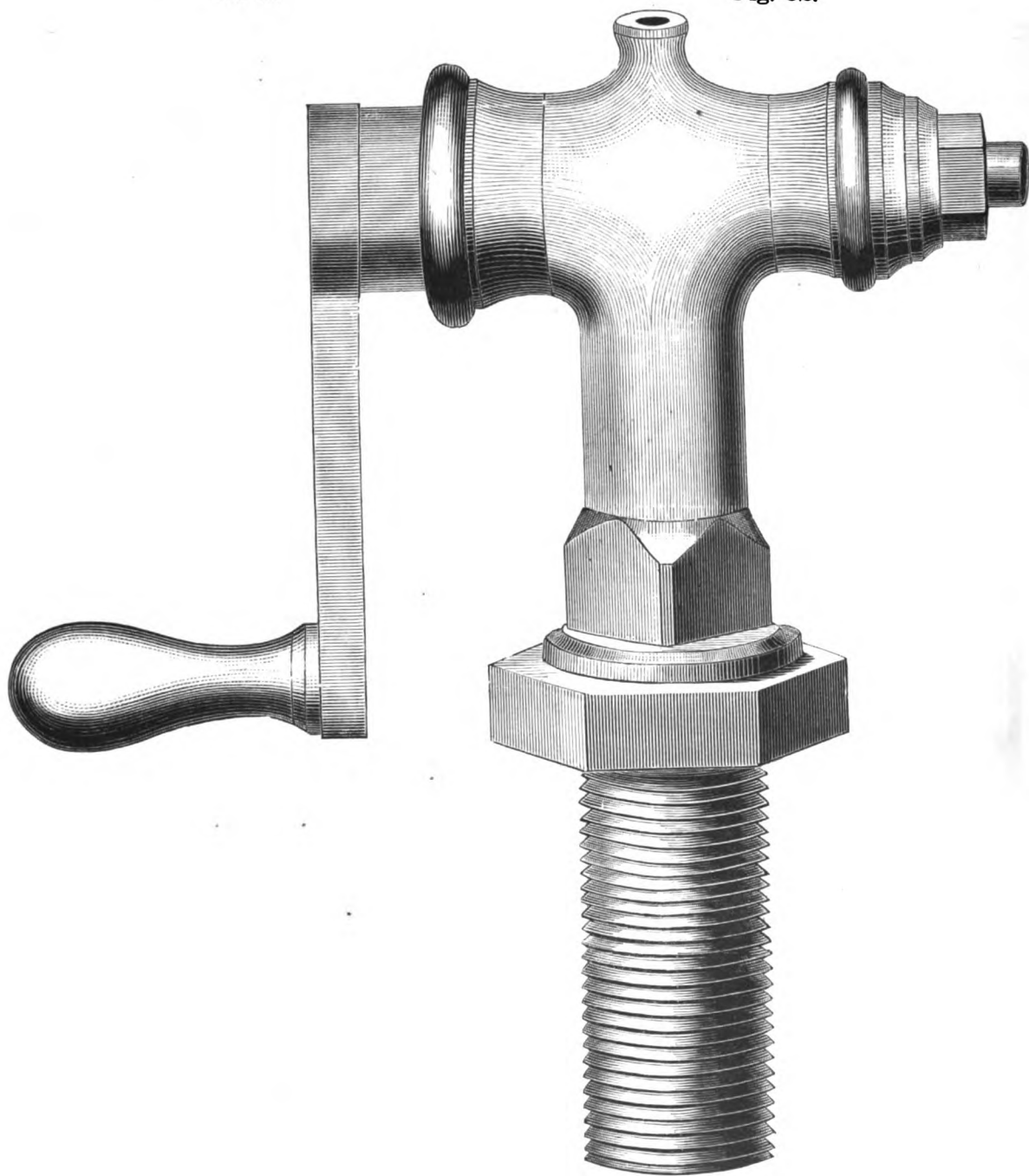
No. 14 Same style. 3 inch Shank, Shoulder and Nut.
Barrel, 1½ inch bore, 3¼ inch deep.

Y&A&S
GAUGE COCKS, BEST STEAM METAL.
SCREW SHANK, SHOULDER AND NUT.

(Full Size.)

No. 15.

Fig. 62.



A. CARR, MANUFACTURER, NEW YORK.

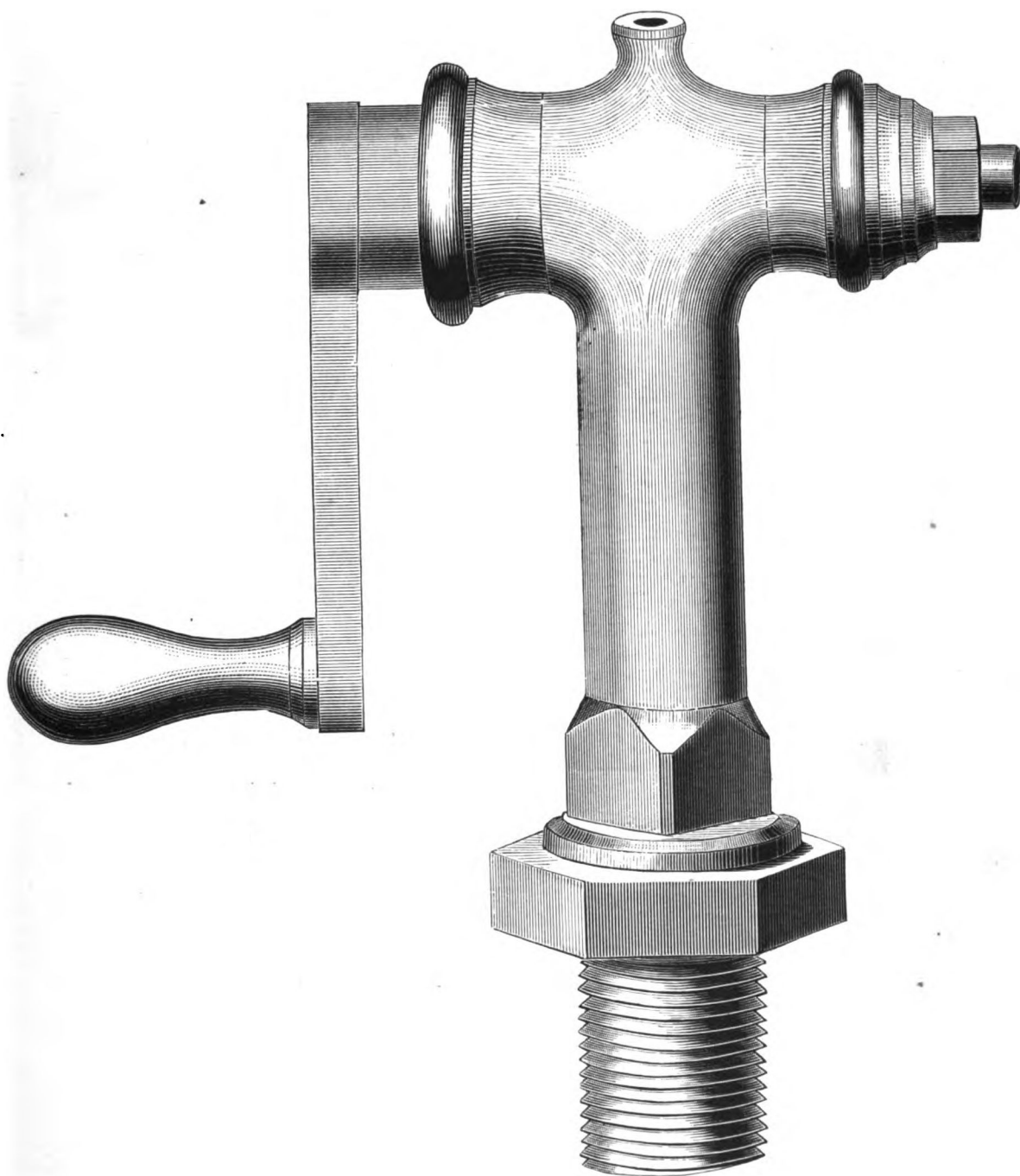
GAUGE COCK, BEST STEAM METAL.

SCREW SHANK, SHOULDER & NUT.

(Full Size.)

No. 16.

Fig. 63.



A. CARR, MANUFACTURER, NEW YORK.

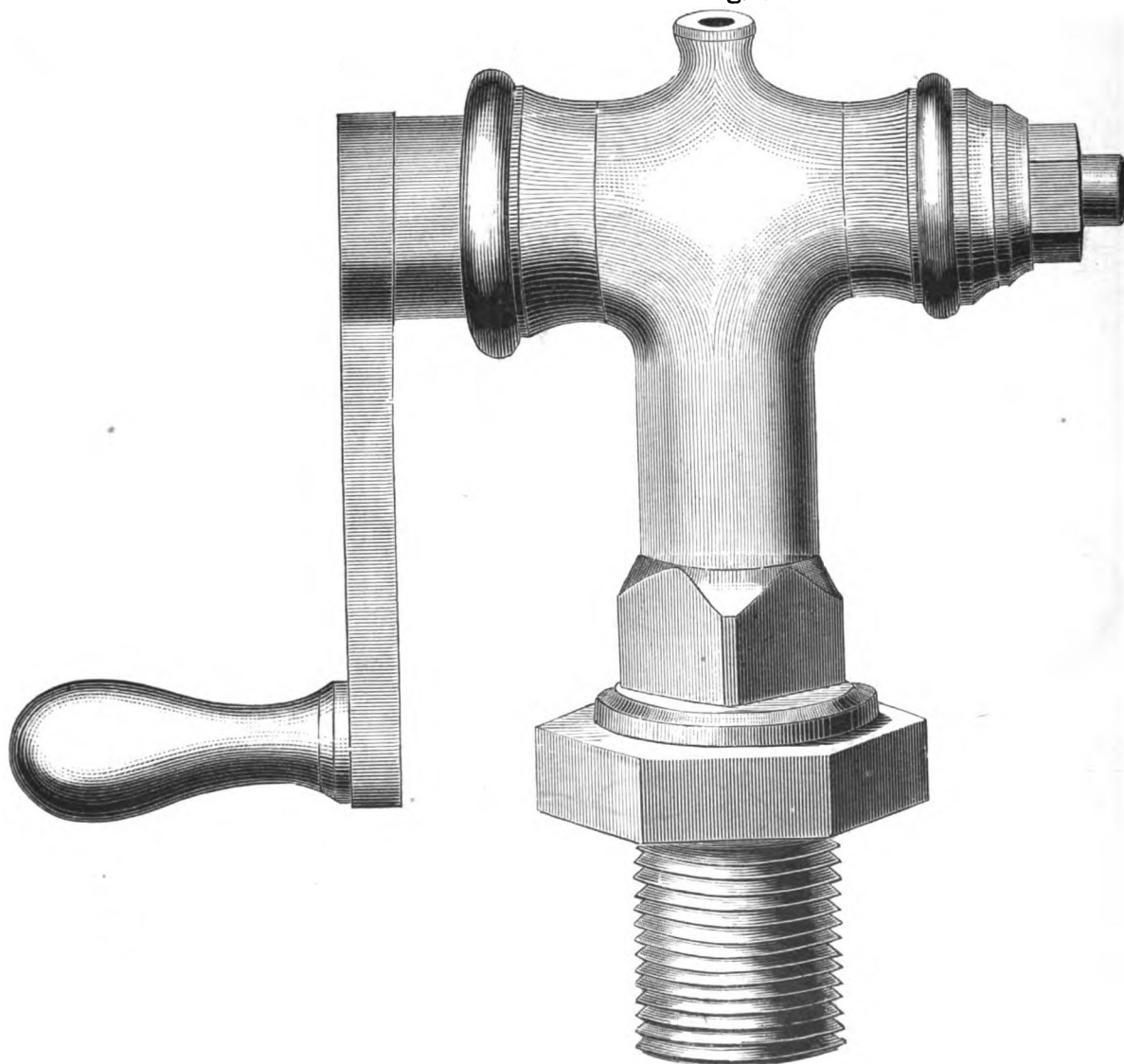
GAUGE COCK, BEST STEAM METAL.

SCREW SHANK, SHOULDER AND NUT.

(Full Size.)

No. 17.

Fig. 65.

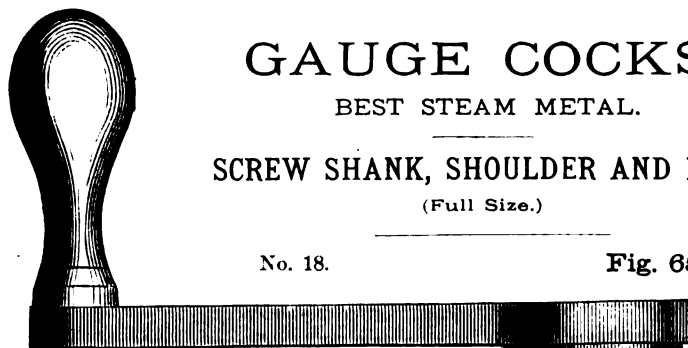


A. CARR, MANUFACTURER, NEW YORK.

GAUGE COCKS,
BEST STEAM METAL.
SCREW SHANK, SHOULDER AND NUT.
(Full Size.)

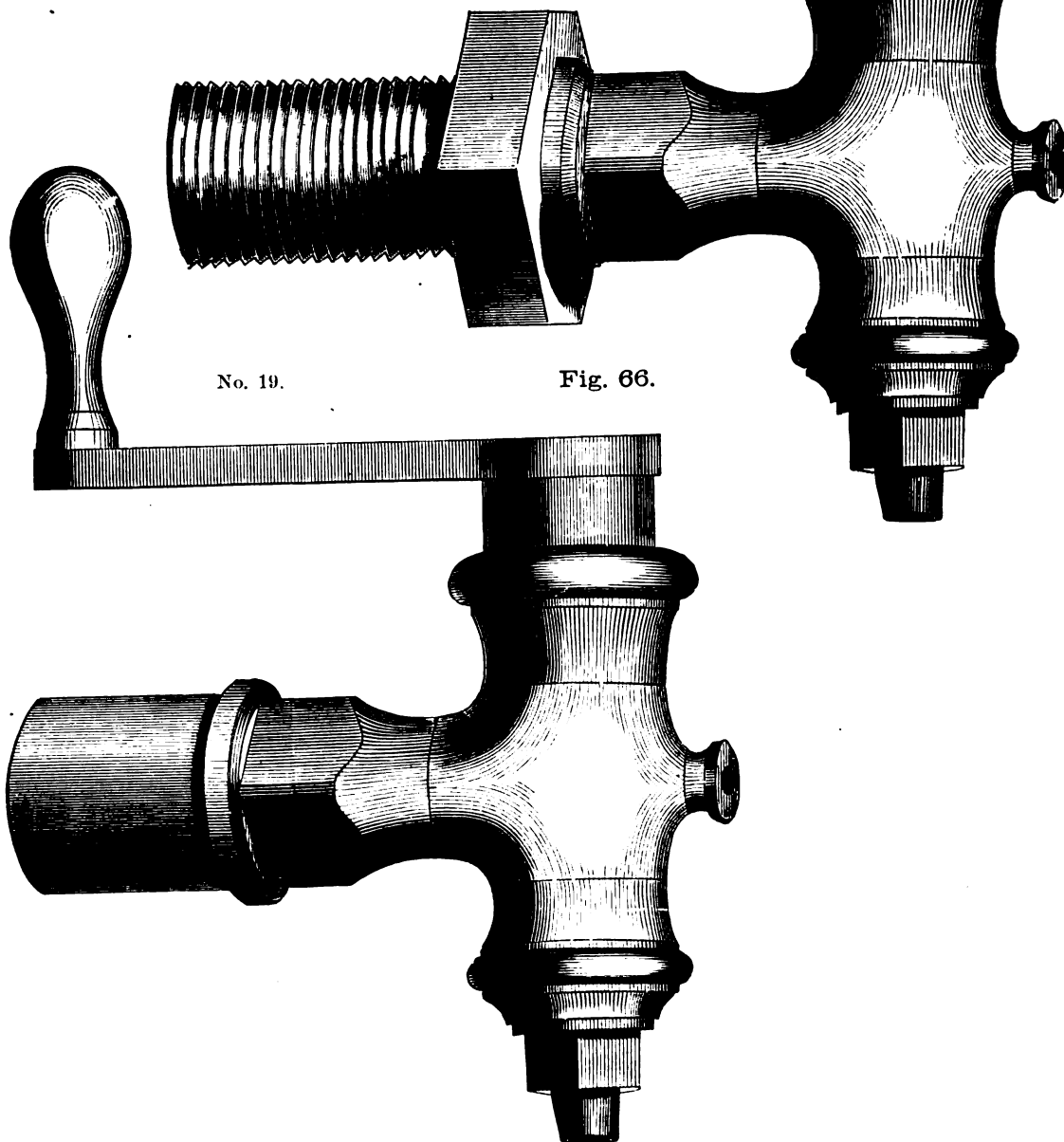
No. 18.

Fig. 65.



No. 19.

Fig. 66.

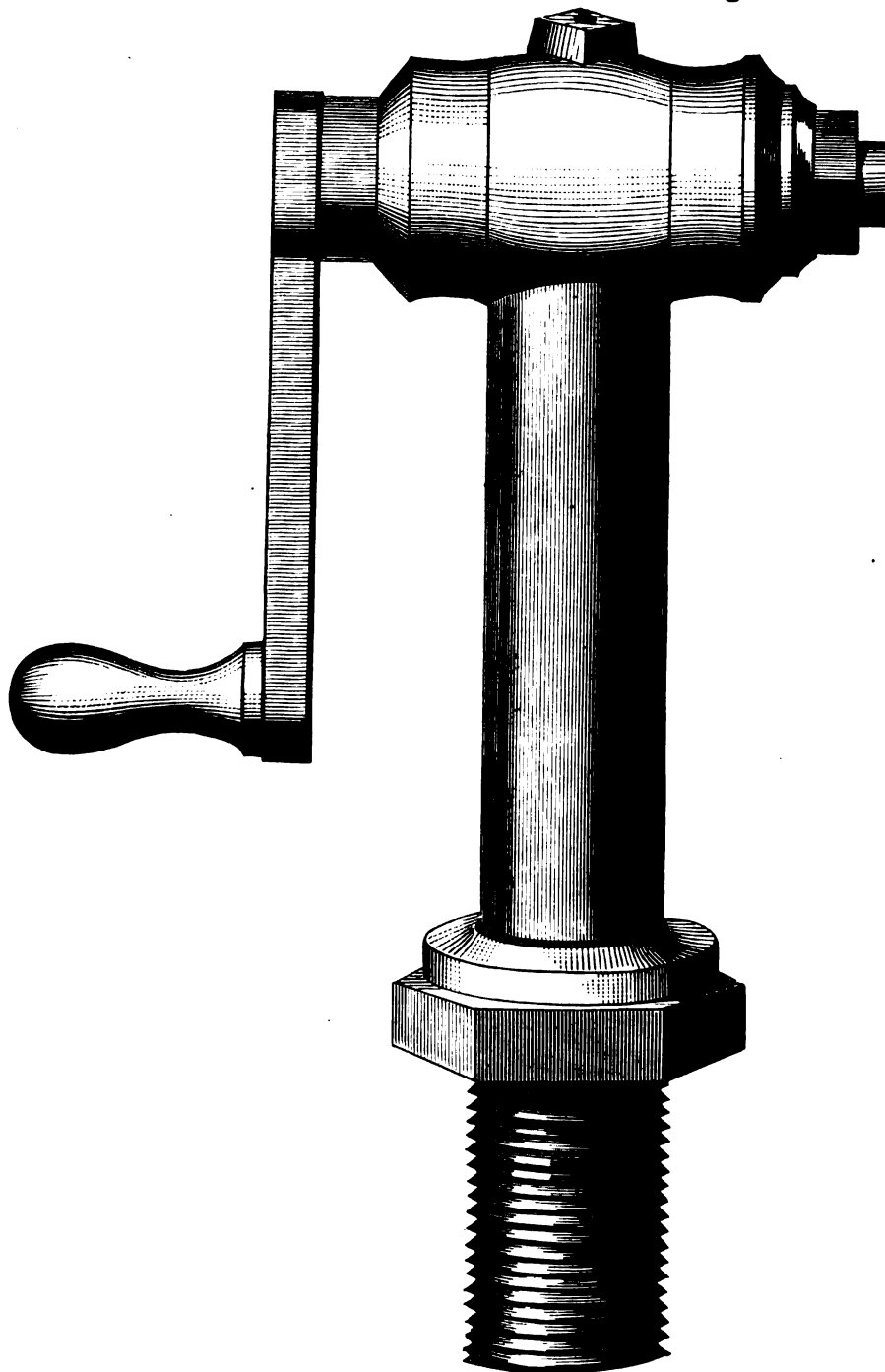


GAUGE COCKS, BEST STEAM METAL, SCREW SHANK, SHOULDER AND NUT.

(Full Size.)

No. 20.

Fig. 67.



A. CARP, MANUFACTURER, NEW YORK.

GAUGE COCKS,

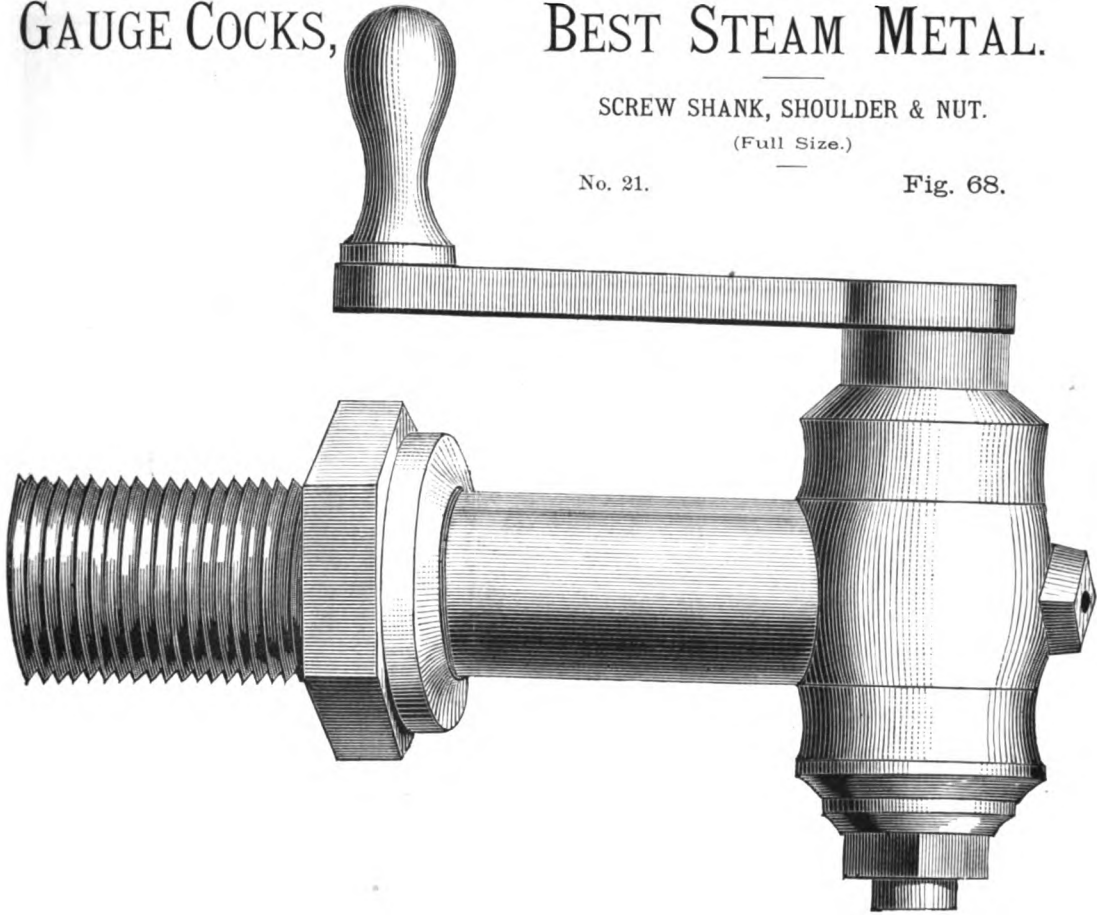
BEST STEAM METAL.

SCREW SHANK, SHOULDER & NUT.

(Full Size.)

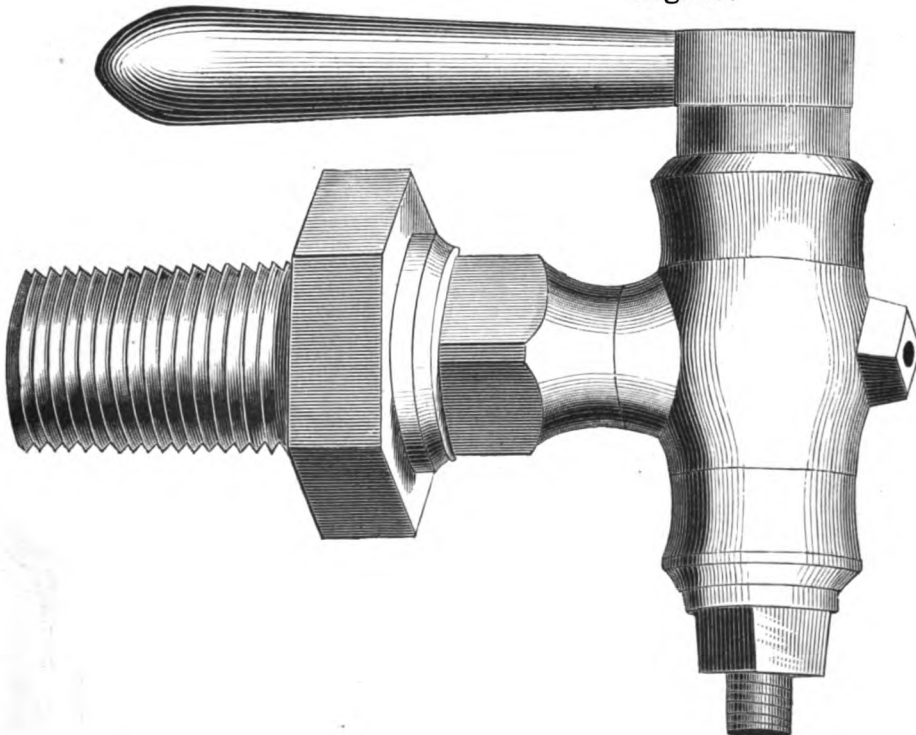
No. 21.

Fig. 68.



No. 22.

Fig. 69.



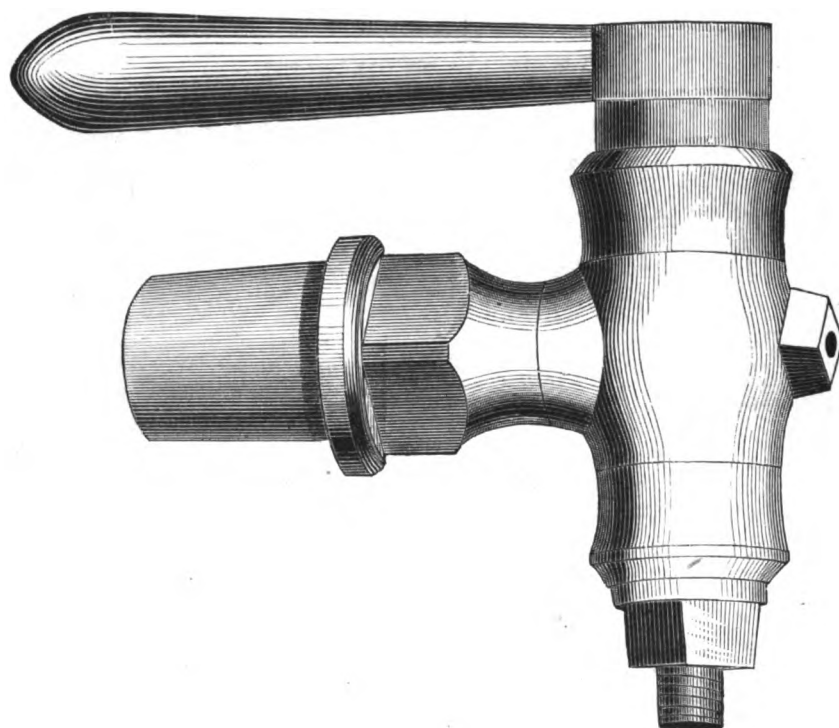
GAUGE COCKS, BEST STEAM METAL,

PLAIN, AND SCREW SHANK, SHOULDER AND NUT.

(Full Size.)

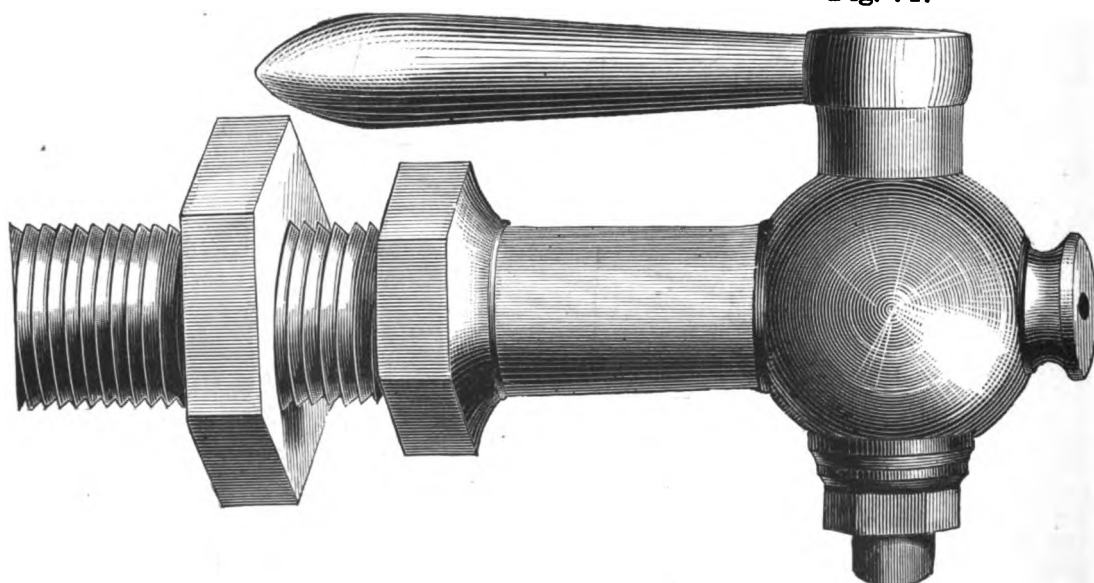
No. 23.

Fig. 70.



No. 24.

Fig. 71.



A. CARR, MANUFACTURER, NEW YORK.

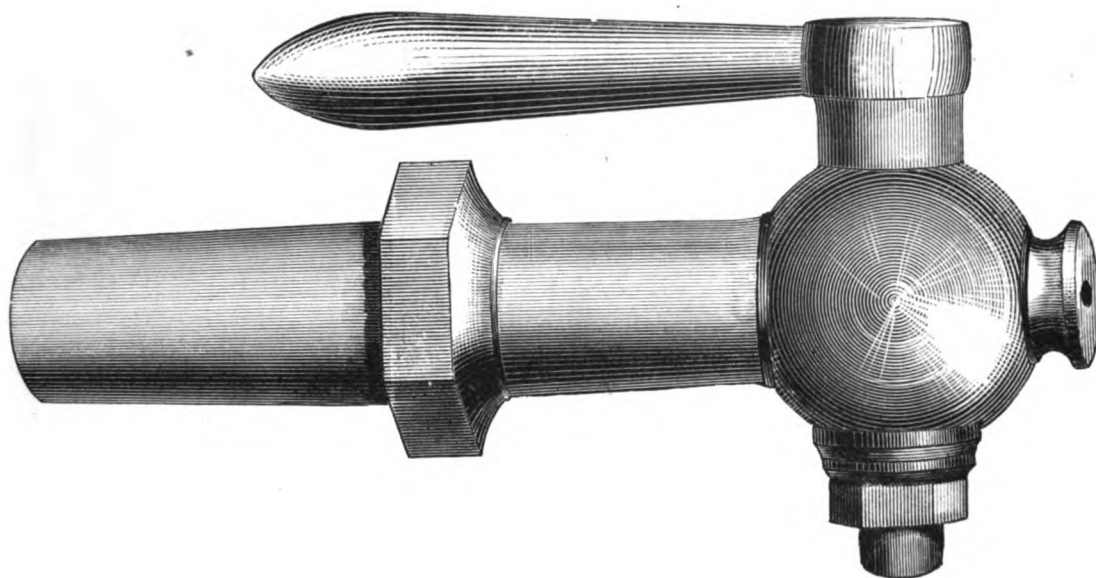
GAUGE COCKS, BEST STEAM METAL.

PLAIN SHANK.

(Full Size.)

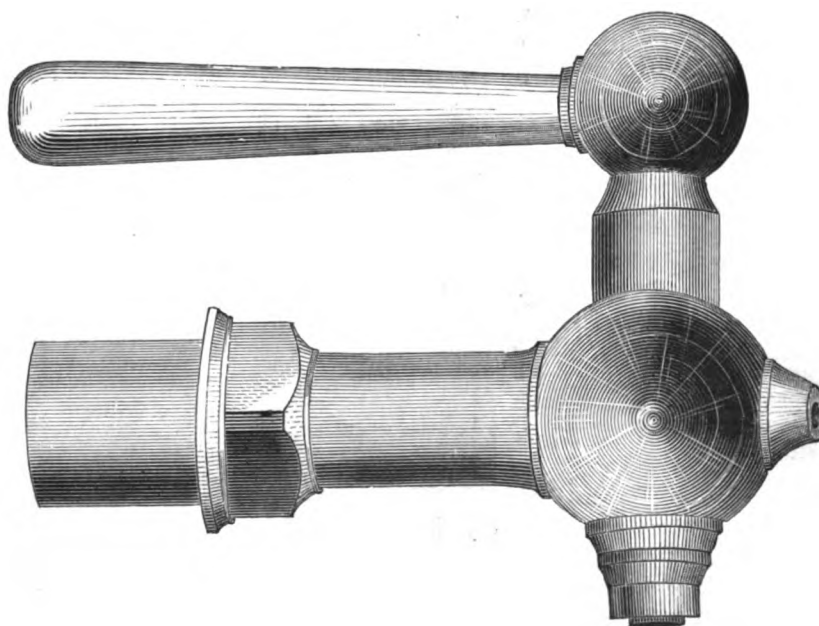
No. 25.

Fig. 72.



No. 26.

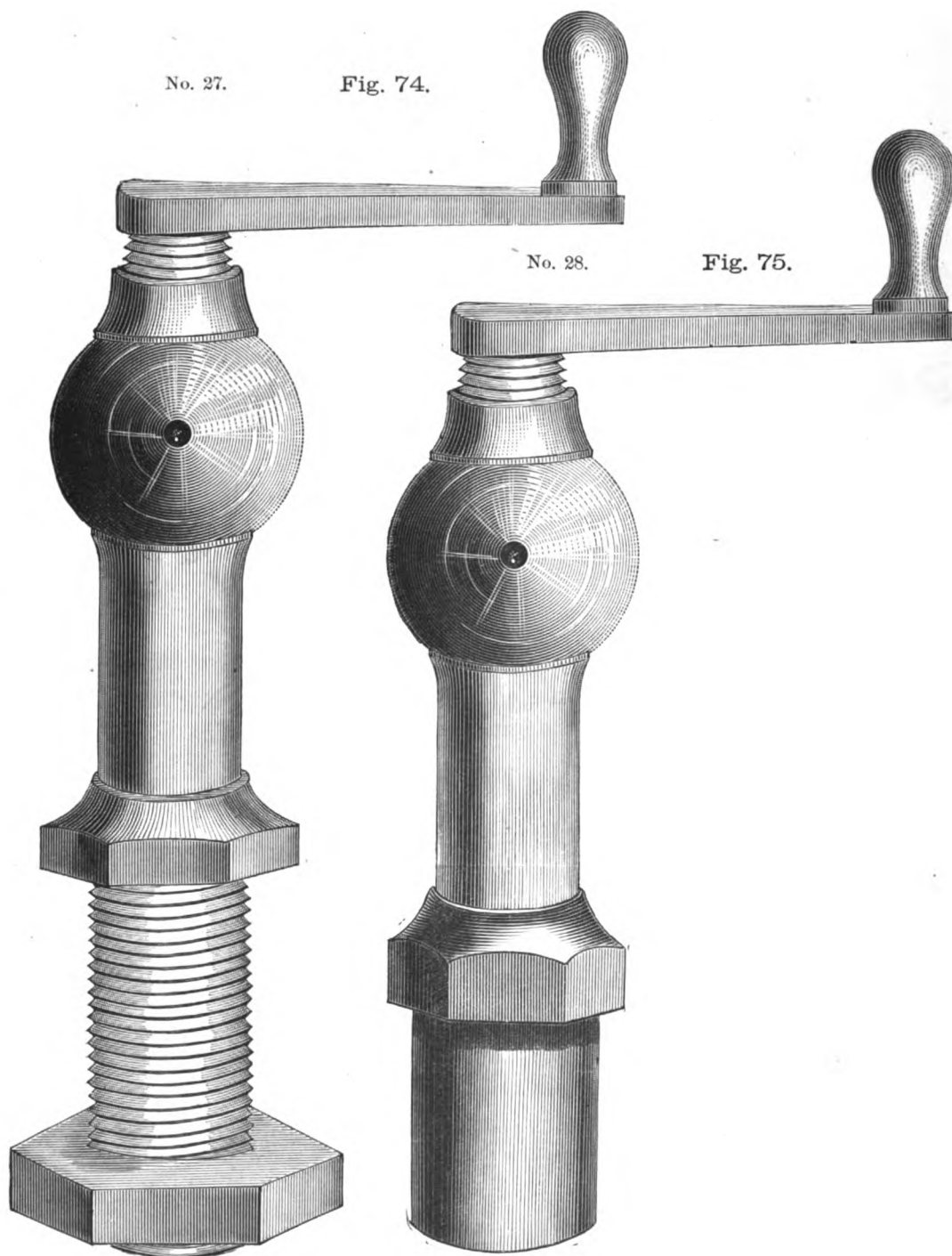
Fig. 73.



COMPRESSION GAUGE COCKS, BEST STEAM METAL.

SCREW SHANK, SHOULDER AND NUT, AND PLAIN.

(Full Size.)



A. CARR, MANUFACTURER, NEW YORK.

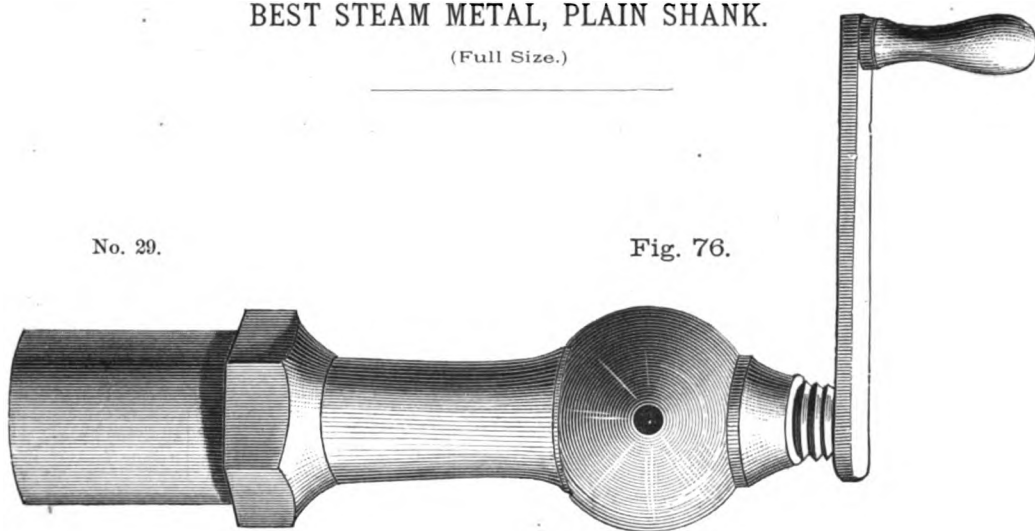
COMPRESSION GAUGE COCKS,

BEST STEAM METAL, PLAIN SHANK.

(Full Size.)

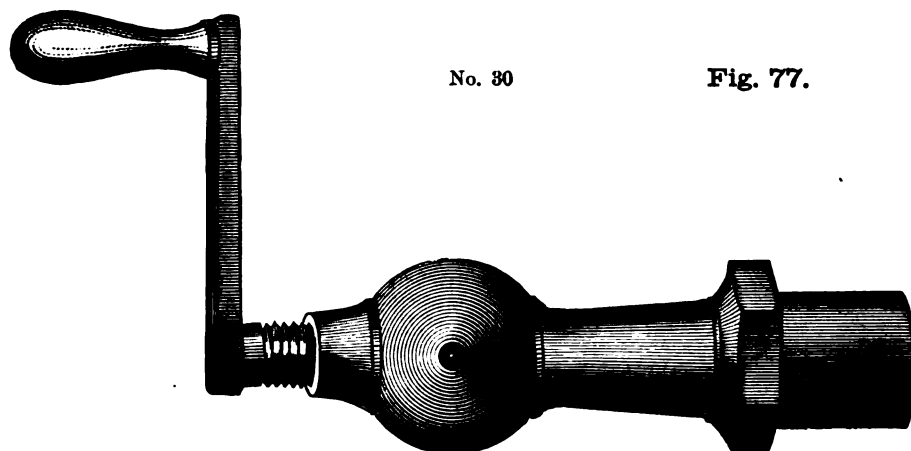
No. 29.

Fig. 76.



No. 30

Fig. 77.



PAYNTER'S PATENT GAUGE COCK.

Fig. 78.



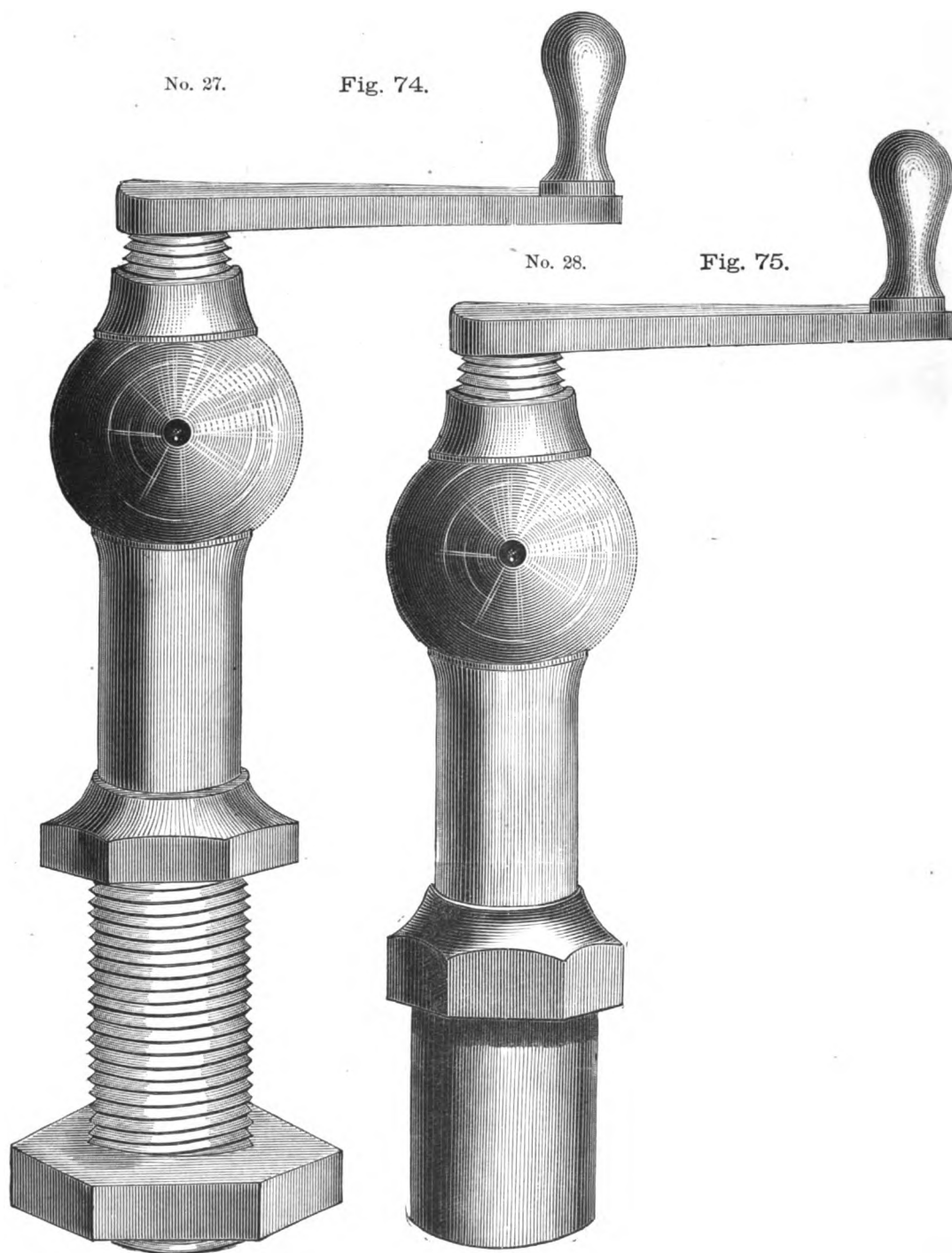
Screwed for $\frac{1}{4}$ and $\frac{3}{8}$ inch pipe.

COMPRESSION GAUGE COCKS,

BEST STEAM METAL.

SCREW SHANK, SHOULDER AND NUT, AND PLAIN.

(Full Size.)



A. CARR, MANUFACTURER, NEW YORK.

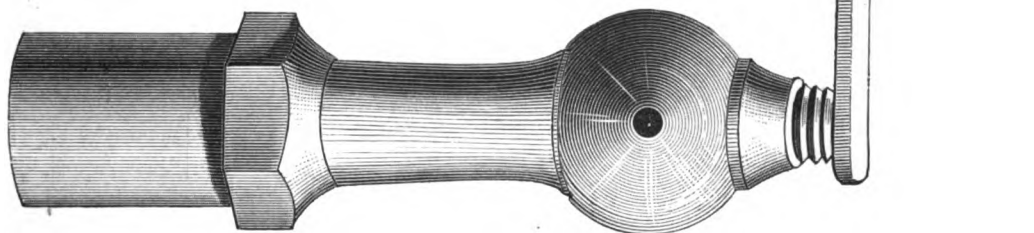
COMPRESSION GAUGE COCKS,

BEST STEAM METAL, PLAIN SHANK.

(Full Size.)

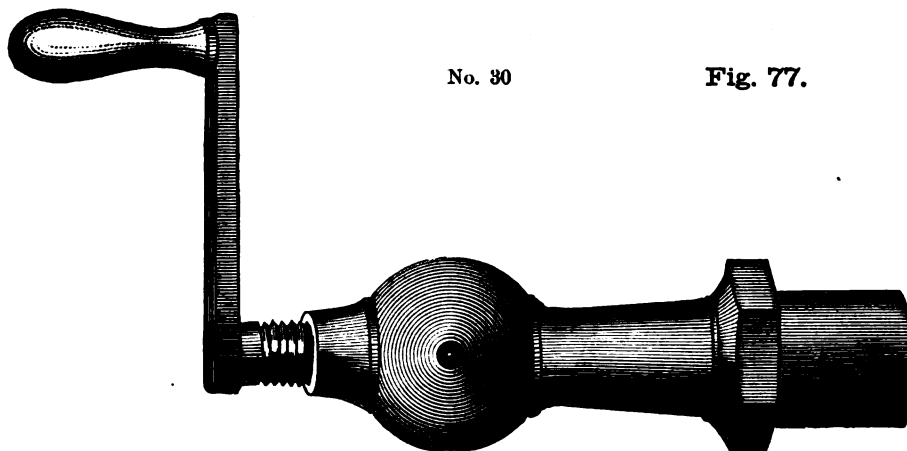
No. 29.

Fig. 76.



No. 30

Fig. 77.



PAYNTER'S PATENT GAUGE COCK.

Fig. 78.



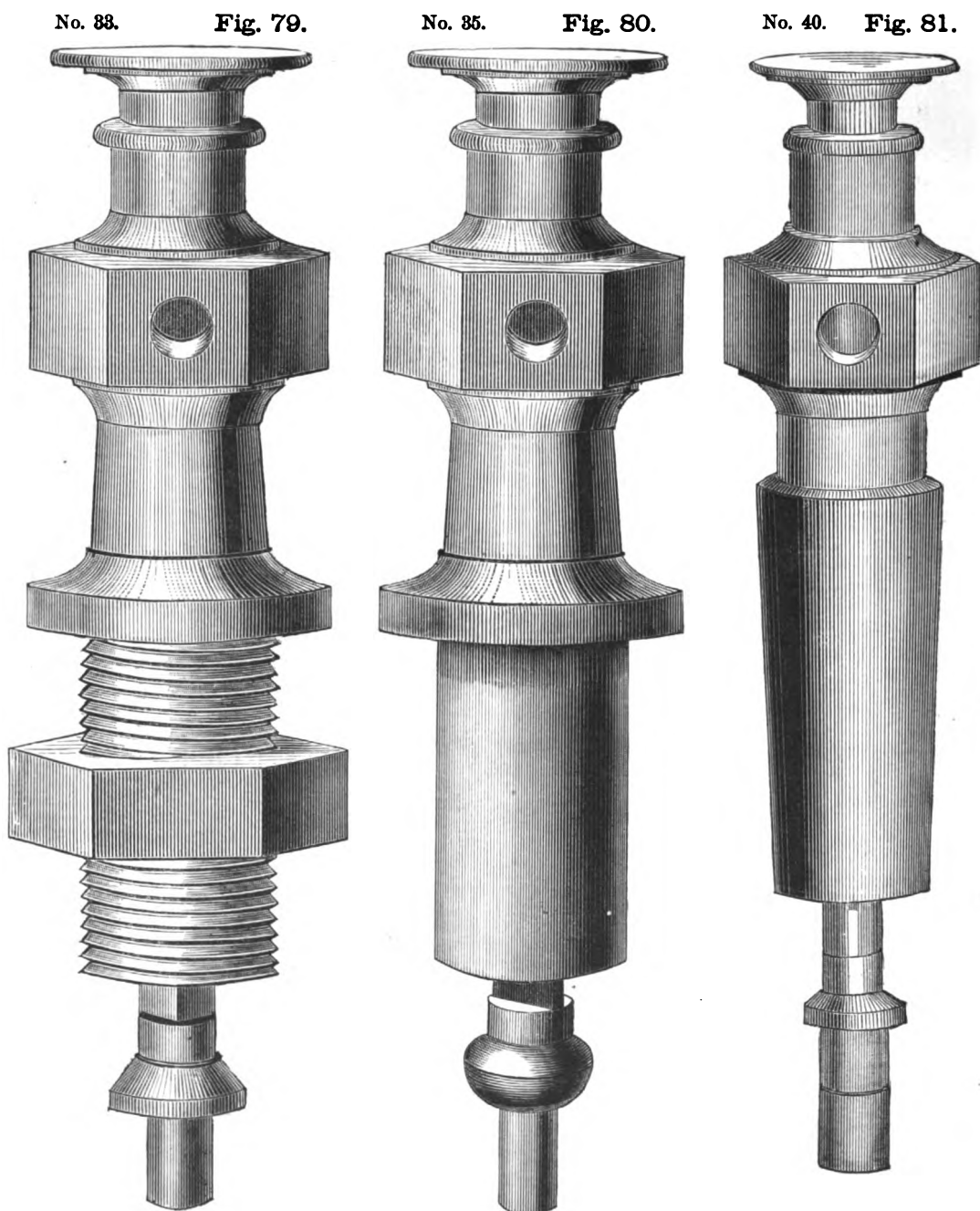
Screwed for $\frac{1}{4}$ and $\frac{1}{2}$ inch pipe.

MISSISSIPPI GAUGE COCKS,

BEST STEAM METAL.

PLAIN, AND SCREW SHANK, SHOULDER AND NUT.

(Full Size.)



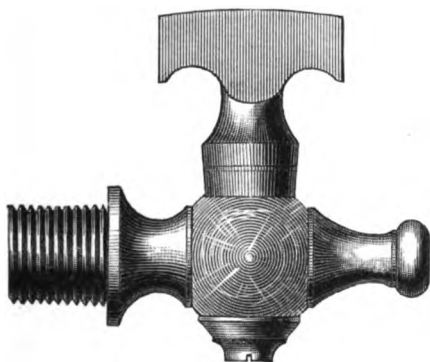
A. CARR, MANUFACTURER, NEW YORK.

AIR COCKS, BEST STEAM METAL. FINISHED.

(Full Size.)

No. 1.

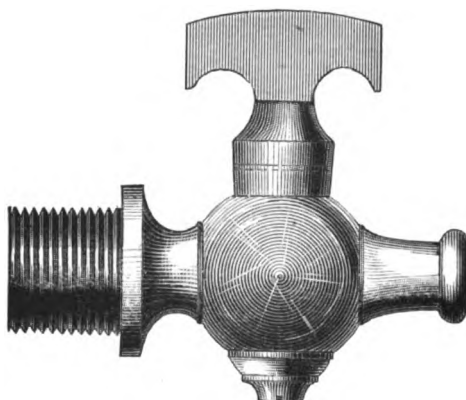
Fig. 82.



Screwed for $\frac{1}{2}$ and $\frac{3}{4}$ inch pipe.

No. 2.

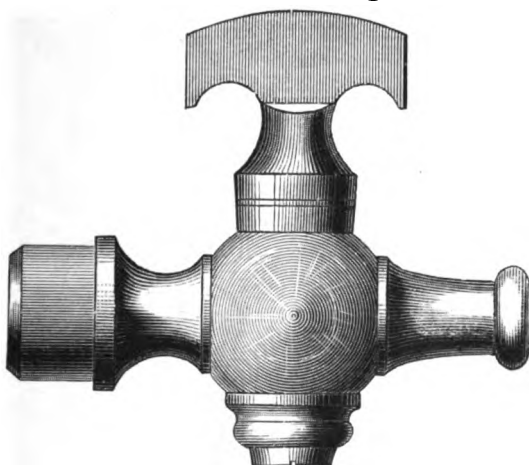
Fig. 83.



Screwed for $\frac{1}{2}$ inch pipe.

No. 3.

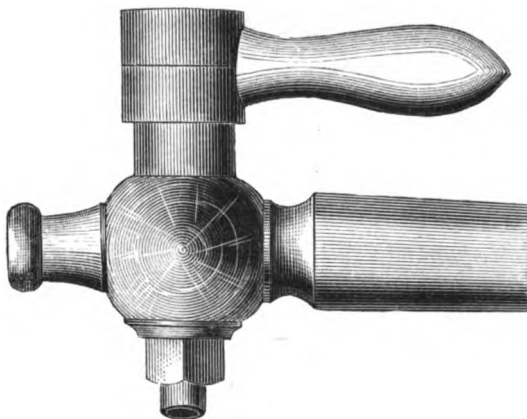
Fig. 84.



Screwed for $\frac{3}{4}$ inch pipe.

No. 4.

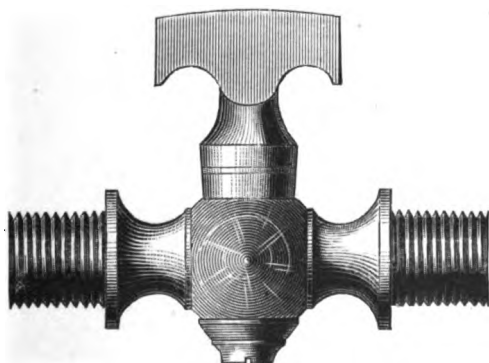
Fig. 85.



Screwed for $\frac{1}{2}$ inch pipe.

No. 5.

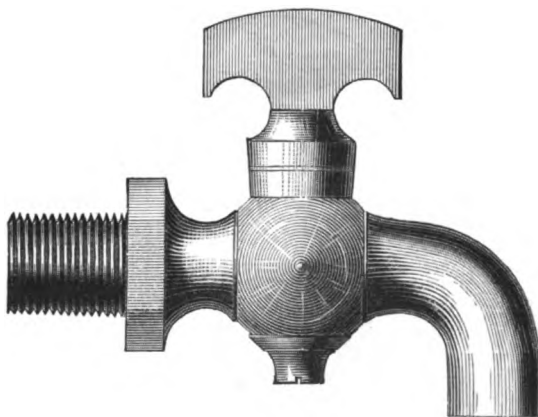
Fig. 86.



Screwed for $\frac{1}{2}$ and $\frac{1}{2}$ inch pipe.

No. 6.

Fig. 87.



No. 6, Screwed for $\frac{1}{2}$ inch pipe.

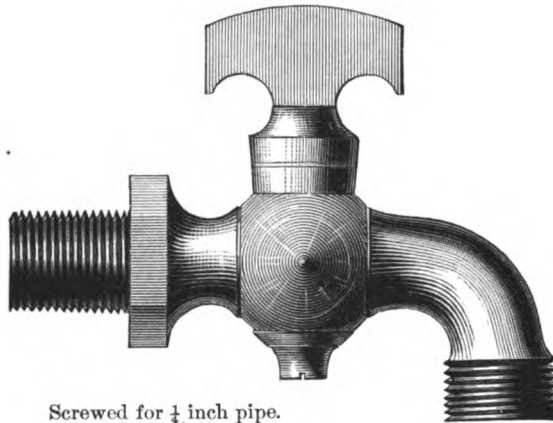
" 7, " " $\frac{3}{4}$ " "

AIR COCKS, BEST STEAM METAL. FINISHED.

(Full Size.)

No. 8.

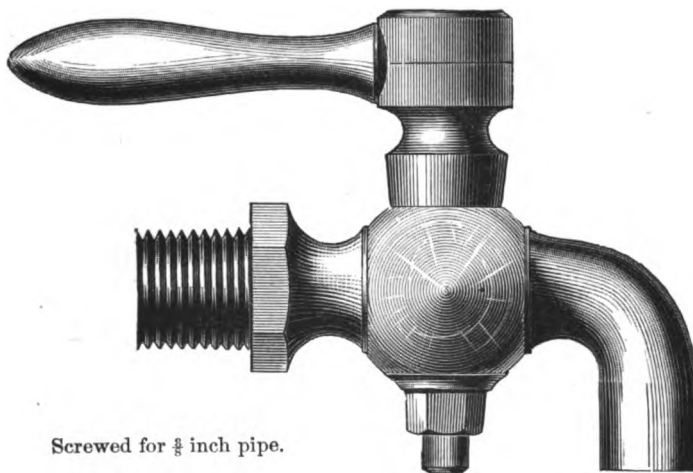
Fig. 88.



Screwed for $\frac{1}{4}$ inch pipe.

No. 9.

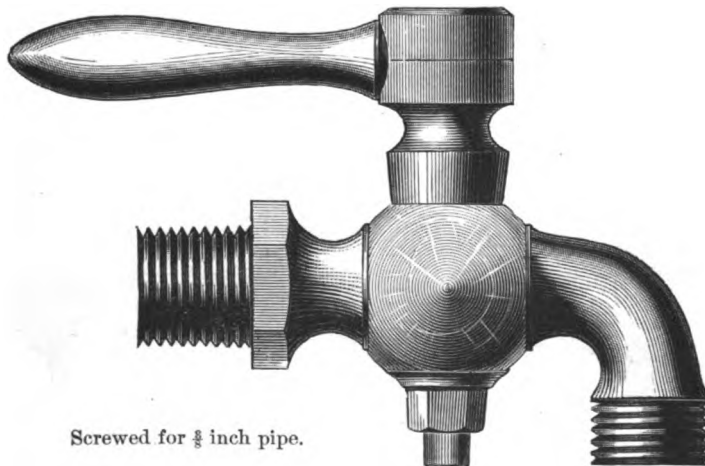
Fig. 89.



Screwed for $\frac{3}{8}$ inch pipe.

No. 10.

Fig. 90.



Screwed for $\frac{3}{8}$ inch pipe.

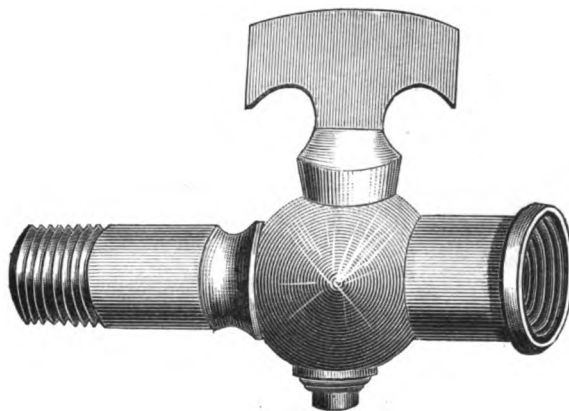
A. CARB, MANUFACTURER, NEW YORK.

COCKS FOR STEAM GAUGES, BEST STEAM METAL, FINISHED.

(Full Size.)

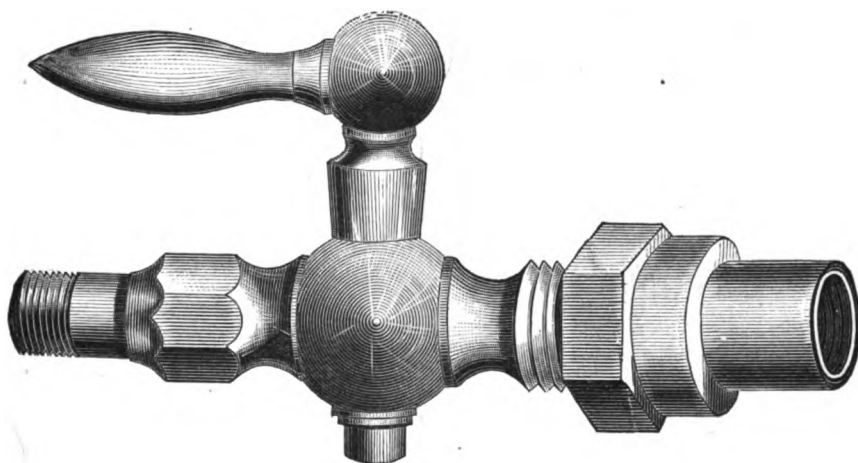
No. 1.

Fig. 91.



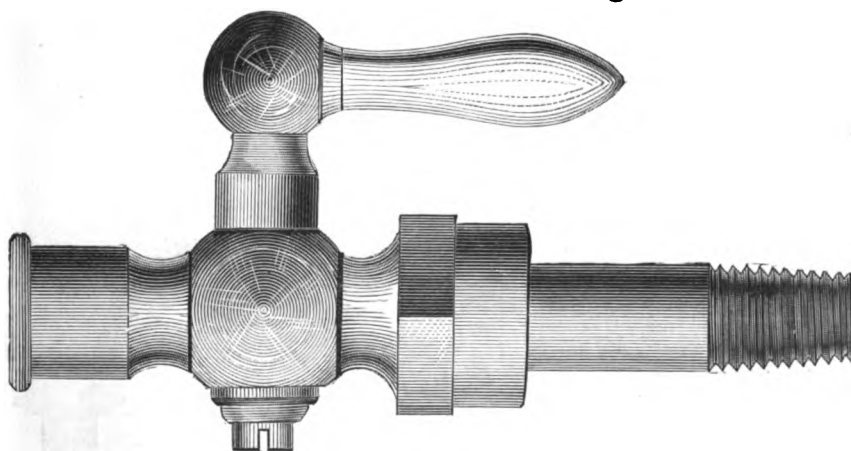
No. 2.

Fig. 92.



No. 3.

Fig. 93.

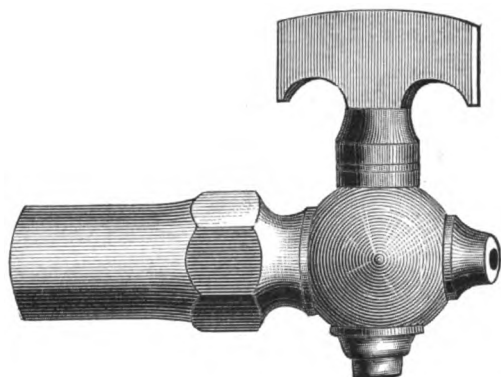


CYLINDER COCKS, BEST STEAM METAL, FINISHED.

(Full Size.)

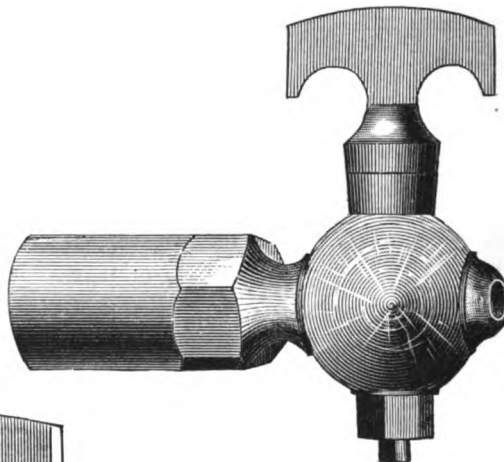
No. 3.

Fig. 94.



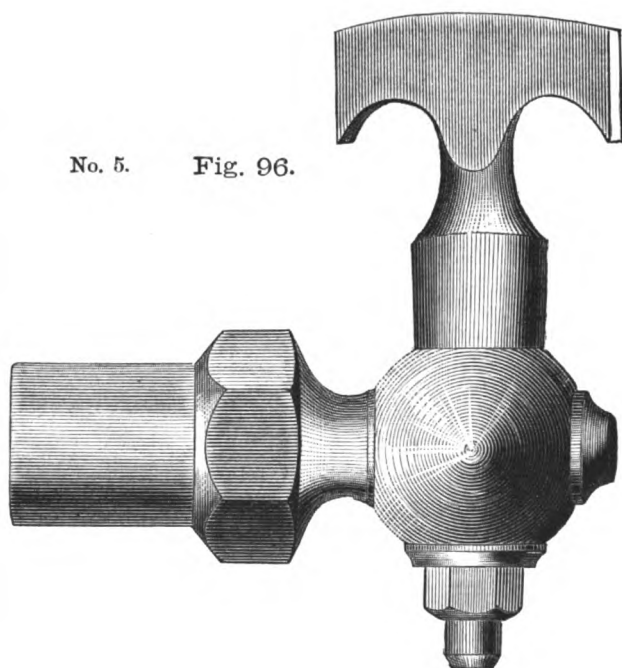
No. 4.

Fig. 95.



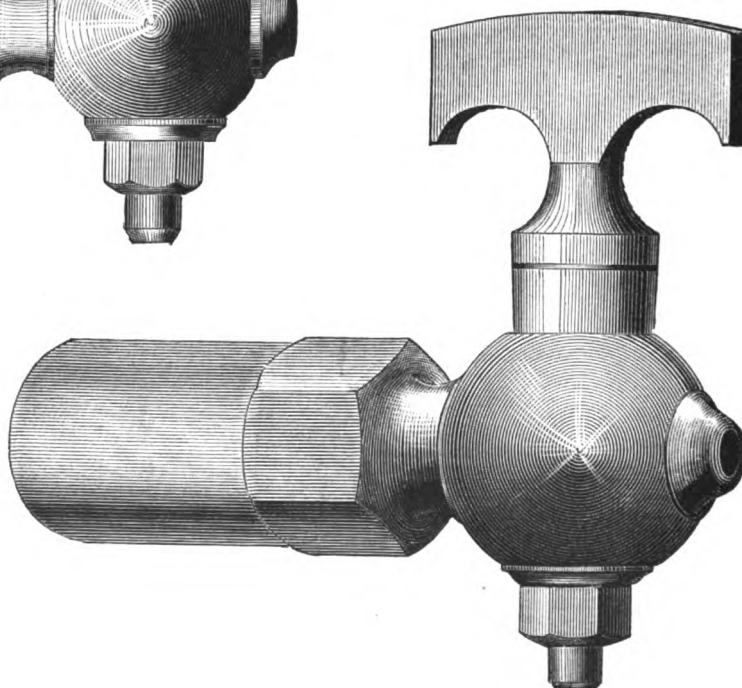
No. 5.

Fig. 96.



No. 6.

Fig. 97.



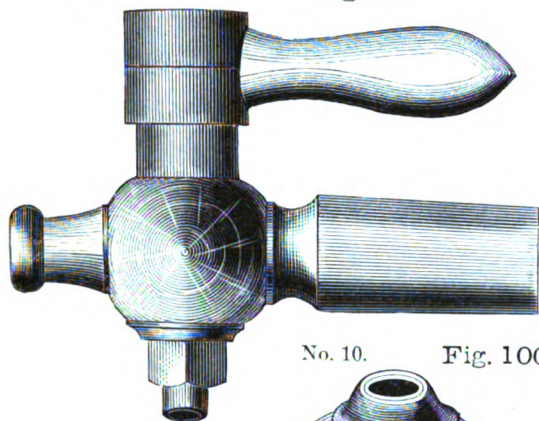
A. CARP, MANUFACTURER, NEW YORK.

CYLINDER COCKS, BEST STEAM METAL. FINISHED.

(Full Size.)

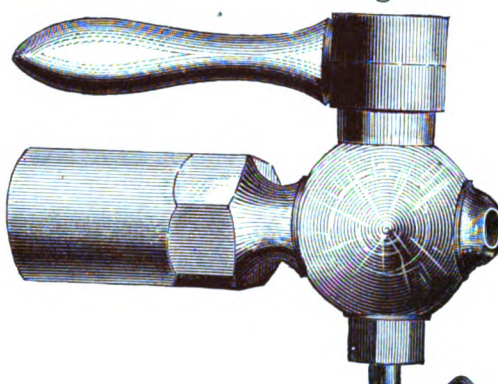
No. 7.

Fig. 98.



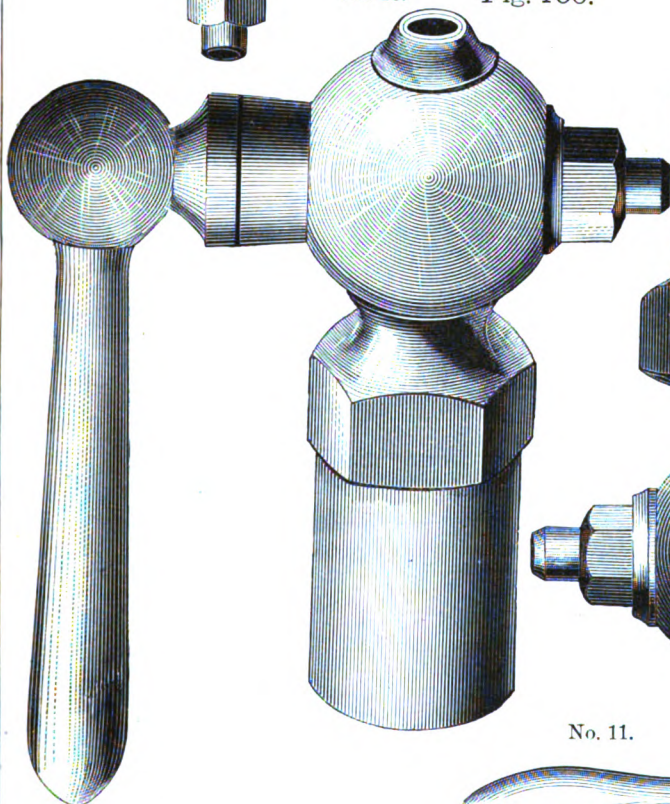
No. 8.

Fig. 99.



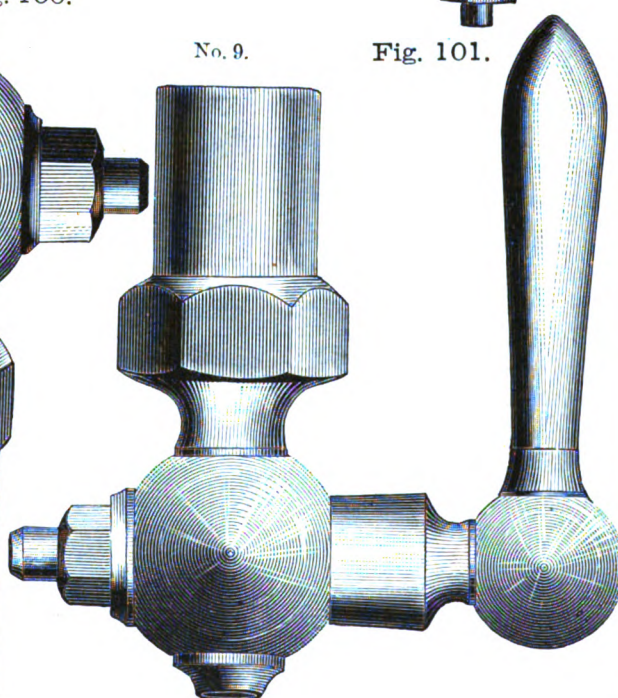
No. 10.

Fig. 100.



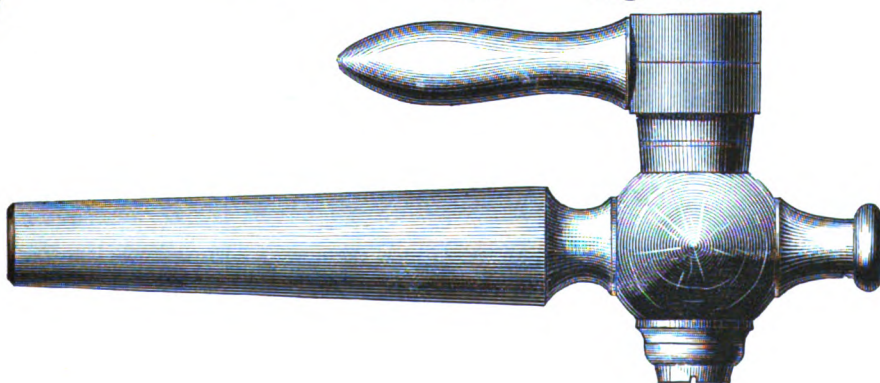
No. 9.

Fig. 101.



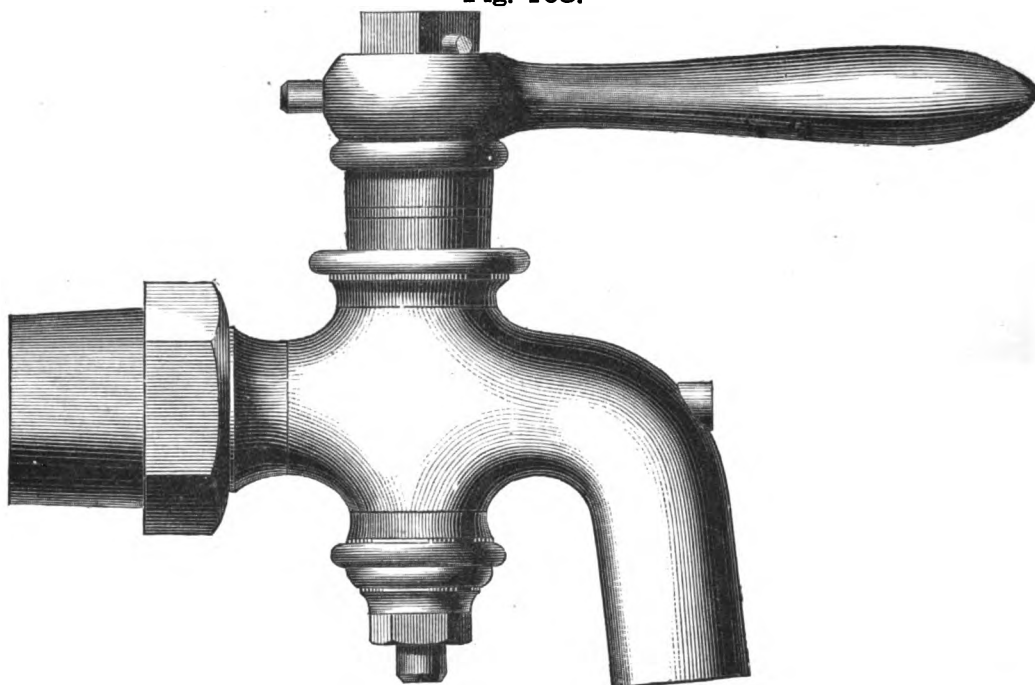
No. 11.

Fig. 102.



STEAM BIBBS, BEST STEAM METAL.

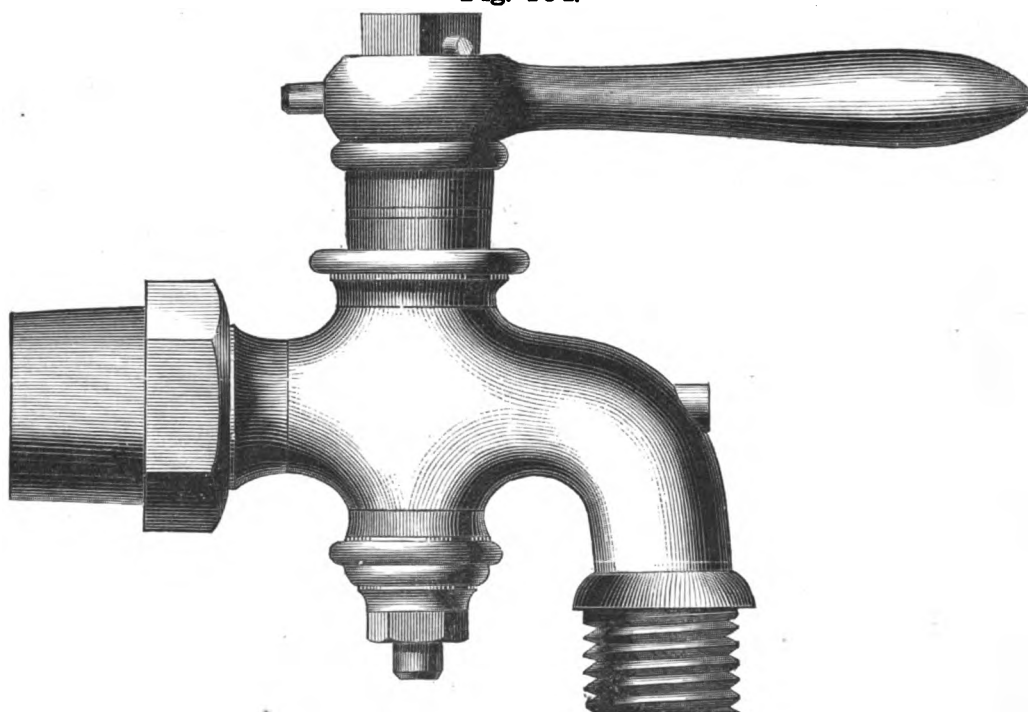
Fig. 103.



Size inside, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, 2, $2\frac{1}{4}$, 3 inch.

SCREW NOZZLE FOR IRON PIPE.

Fig. 104.

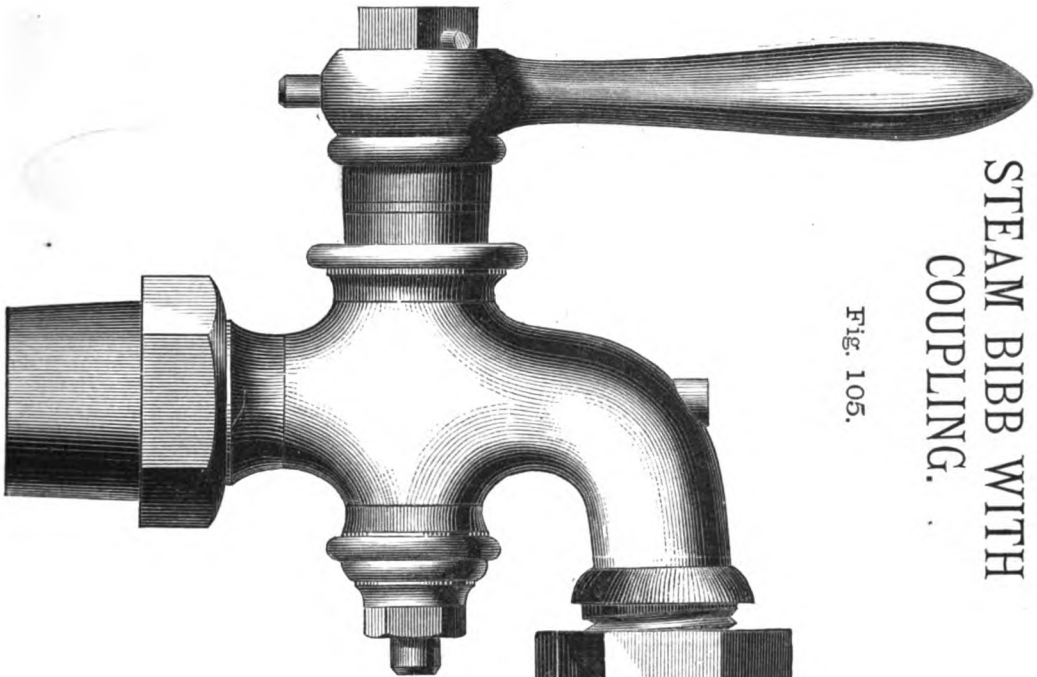


Size inside, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, 1 inch.

A. CARB, MANUFACTURER, NEW YORK.

STEAM BIBB WITH COUPLING.

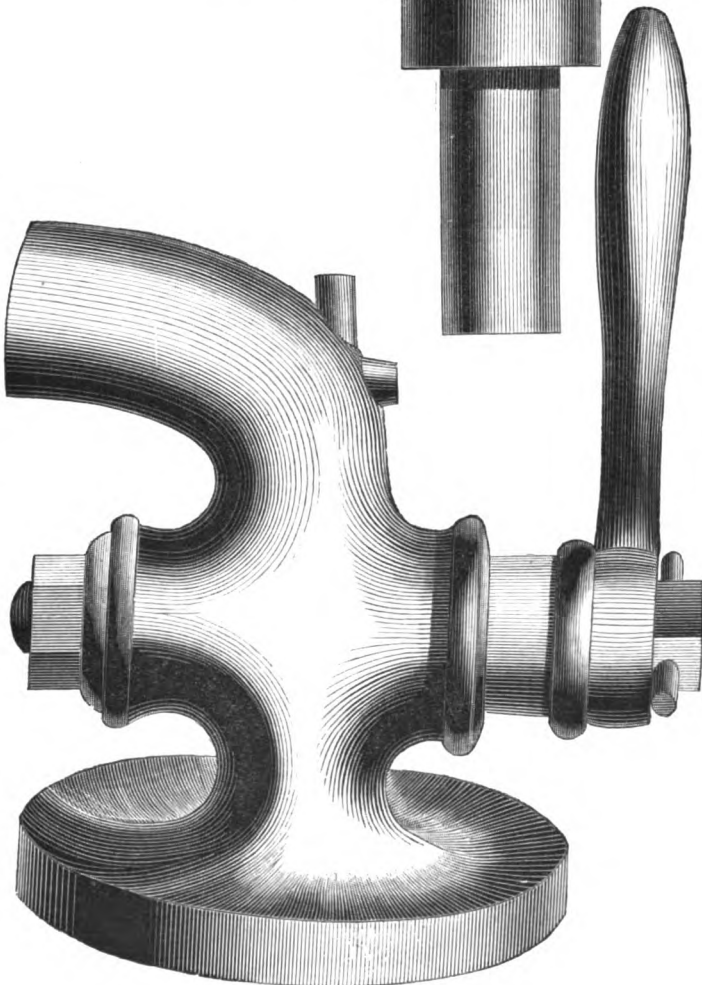
Fig. 105.



Size inside, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, 1 inch.

STEAM BIBB WITH FLANGE.

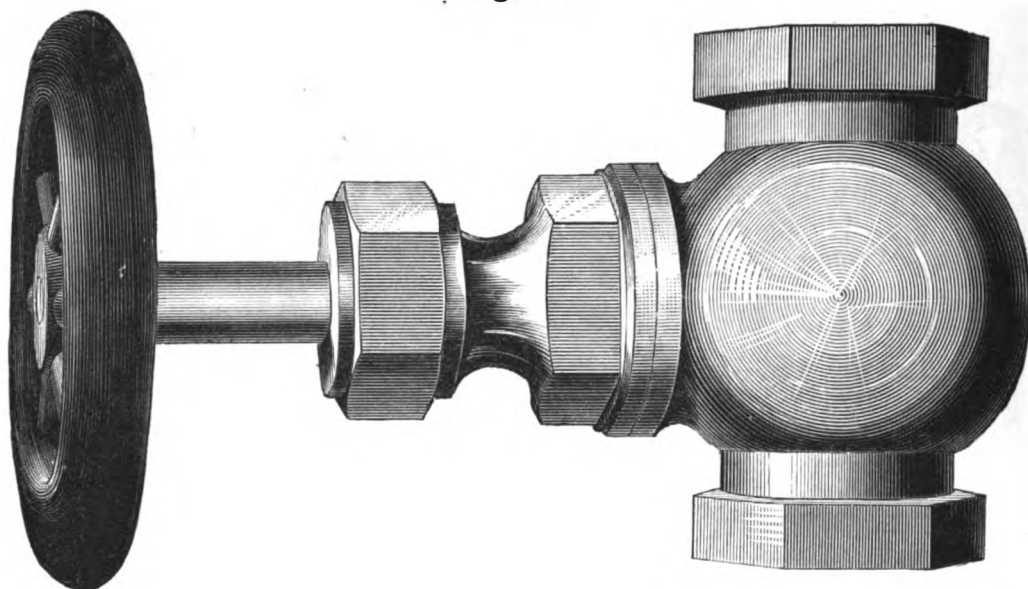
Fig. 106.



Size inside, - - - 1, $1\frac{1}{2}$, $1\frac{1}{2}$, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4 inches.
Diameter of Flange, 4, $4\frac{1}{2}$, 5, $5\frac{1}{2}$, 6, 7, $7\frac{1}{2}$, 9, 10 "

GLOBE VALVE, BEST STEAM METAL.

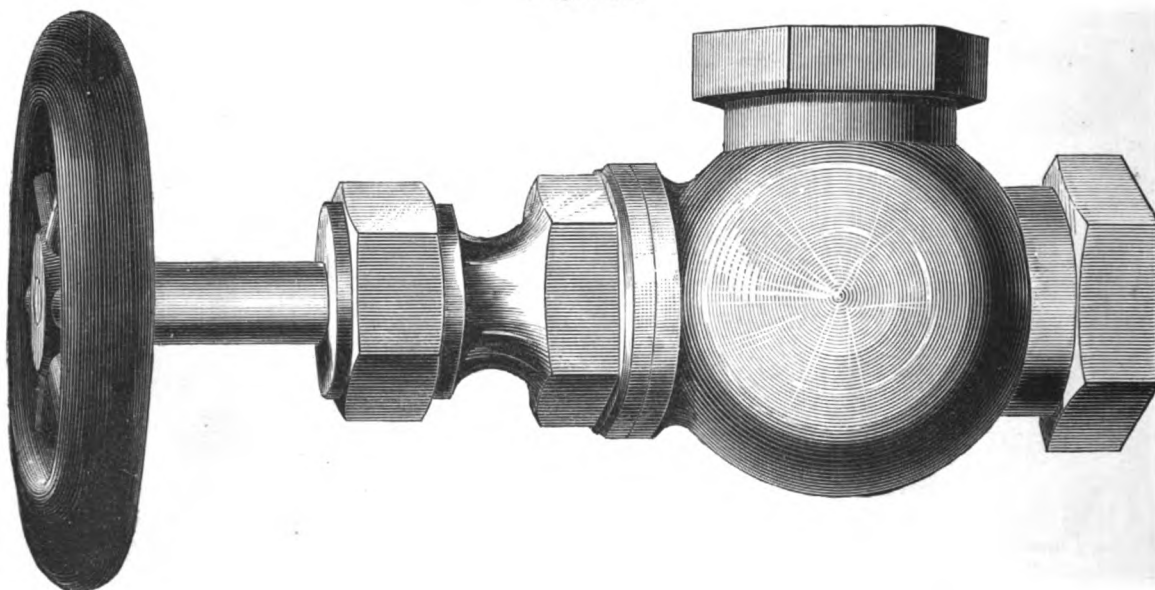
Fig. 111.



Sizes, - - - - -	$\frac{1}{2}$, $\frac{3}{4}$, 1 , $1\frac{1}{2}$, 2 , 3 , 4 , 5 , 6	inches.
Diameter of Flanges, - - - - -	$\frac{1}{2}$, $\frac{3}{4}$, 1 , $1\frac{1}{2}$, 2 , 3 , 4 , 5 , 6	"
Between Faces of Flanges, - - - - -	$\frac{1}{2}$, $\frac{3}{4}$, 1 , $1\frac{1}{2}$, 2 , 3 , 4 , 5 , 6	"

ANGLE VALVE, BEST STEAM METAL.

Fig. 112.

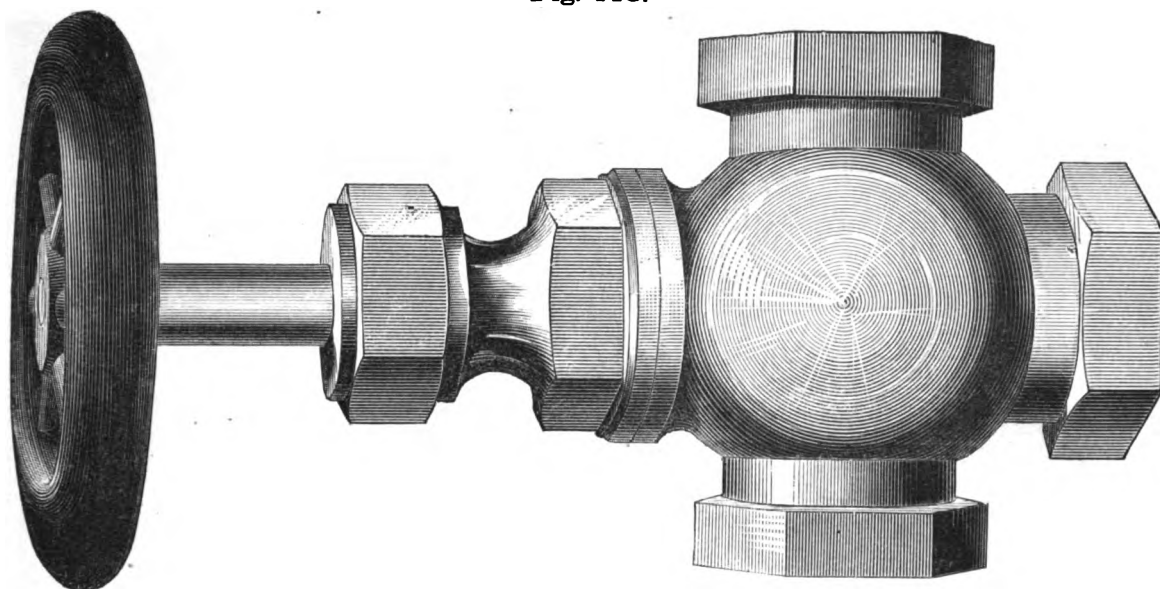


Sizes, - - - - -	$\frac{1}{2}$, $\frac{3}{4}$, 1 , $1\frac{1}{2}$, 2 , 3 , 4 , 5 , 6	inches.
Diameter of Flanges, - - - - -	$\frac{1}{2}$, $\frac{3}{4}$, 1 , $1\frac{1}{2}$, 2 , 3 , 4 , 5 , 6	"
Between Faces of Flanges, - - - - -	$\frac{1}{2}$, $\frac{3}{4}$, 1 , $1\frac{1}{2}$, 2 , 3 , 4 , 5 , 6	"

A. CARR, MANUFACTURER, NEW YORK.

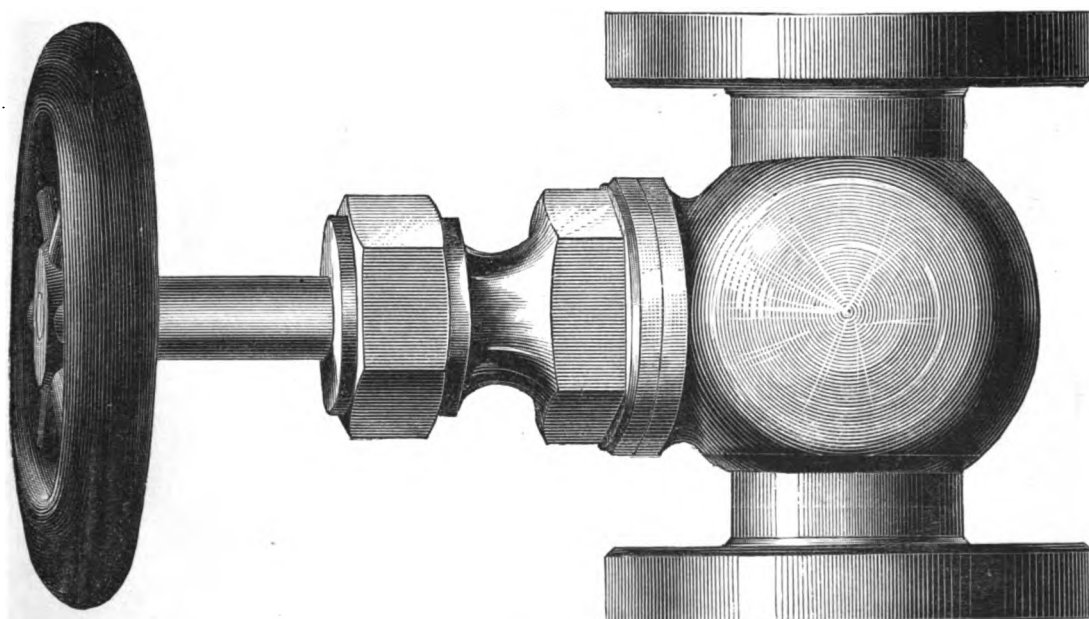
CROSS VALVES, BEST STEAM METAL.

Fig. 113.



Sizes, - - - - - $\frac{1}{2}$, 1, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, 5, 6 inches.
 Diameter of Flanges, - - 4, 4, 5, $5\frac{1}{2}$, $6\frac{3}{8}$, 7, 8, 9, 10, 11, 12 "
 Between Faces of Flanges, 4, 4, 3, $5\frac{1}{2}$, $5\frac{1}{2}$, 7, $8\frac{3}{8}$, 9, $10\frac{1}{2}$, $12\frac{1}{2}$, $13\frac{1}{2}$ "

Fig. 114.

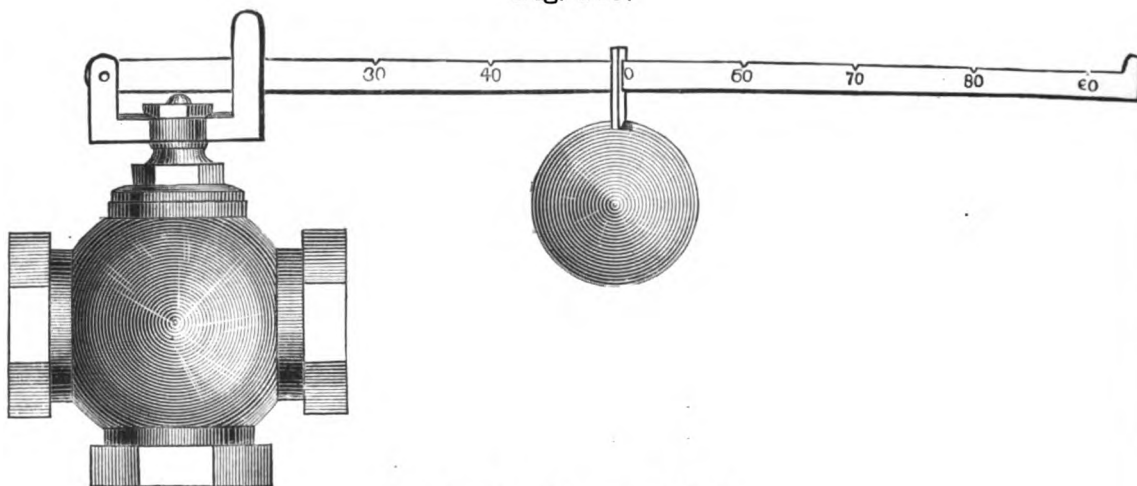


Sizes, - - - - - $\frac{1}{2}$, 1, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, 5, 6 inches.
 Diameter of Flanges, - - 4, 4, 5, $5\frac{1}{2}$, $6\frac{3}{8}$, 7, 8, 9, 10, 11, 12 "
 Between Faces of Flanges, 4, 4, 3, $5\frac{1}{2}$, $5\frac{1}{2}$, 7, $8\frac{3}{8}$, 9, $10\frac{1}{2}$, $12\frac{1}{2}$, $13\frac{1}{2}$ "

SAFETY VALVES, BEST STEAM METAL.

(WITH FLANGES SAME DIAMETER AND DISTANCE BETWEEN
FACES AS GLOBE VALVES.)

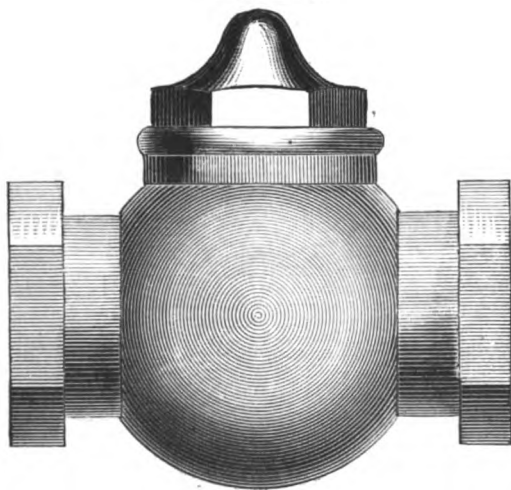
Fig. 115.



Sizes, $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3 inches.

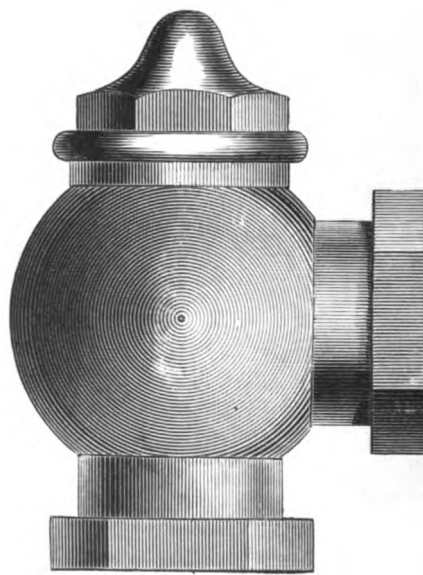
HORIZONTAL CHECK VALVE.

Fig. 116.



ANGLE CHECK VALVE.

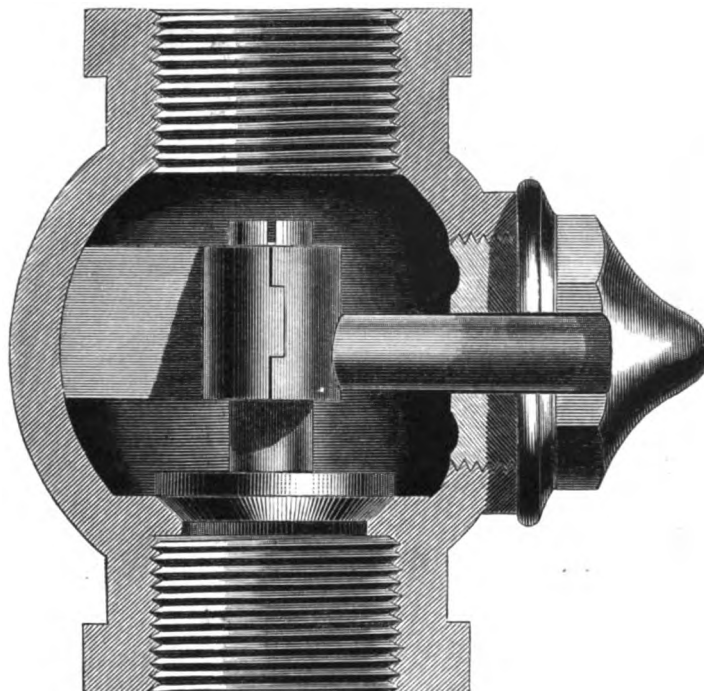
Fig. 117.



Sizes, $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3 inches.

VERTICAL CHECK VALVE, BEST STEAM METAL.

Fig. 118.



Sizes, $\frac{1}{4}$, $\frac{1}{2}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, 2, $2\frac{1}{4}$, 3 inches.

PUMP VALVES, WITH AIR CHAMBER.

Fig. 119.

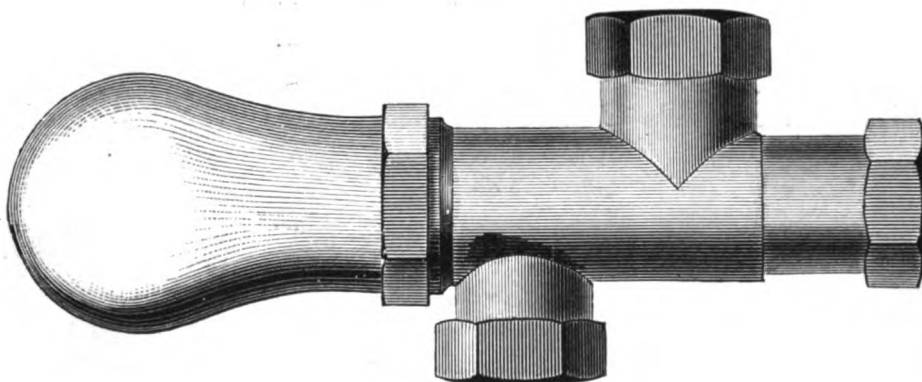
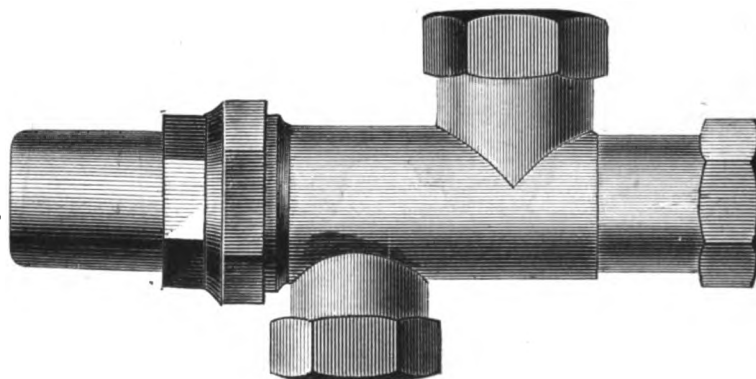


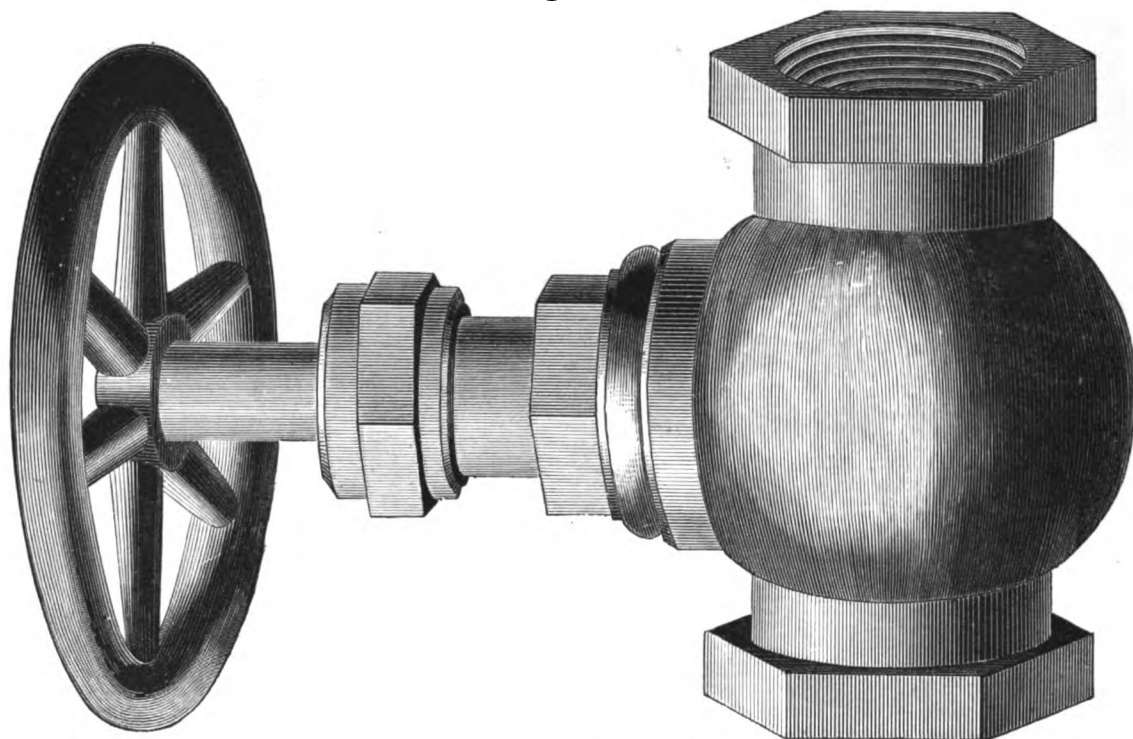
Fig. 120.



Sizes, $\frac{1}{4}$, 1, $1\frac{1}{4}$, 1 inches.

GLOBE VALVE, IRON BODY, BRASS MOUNTED.

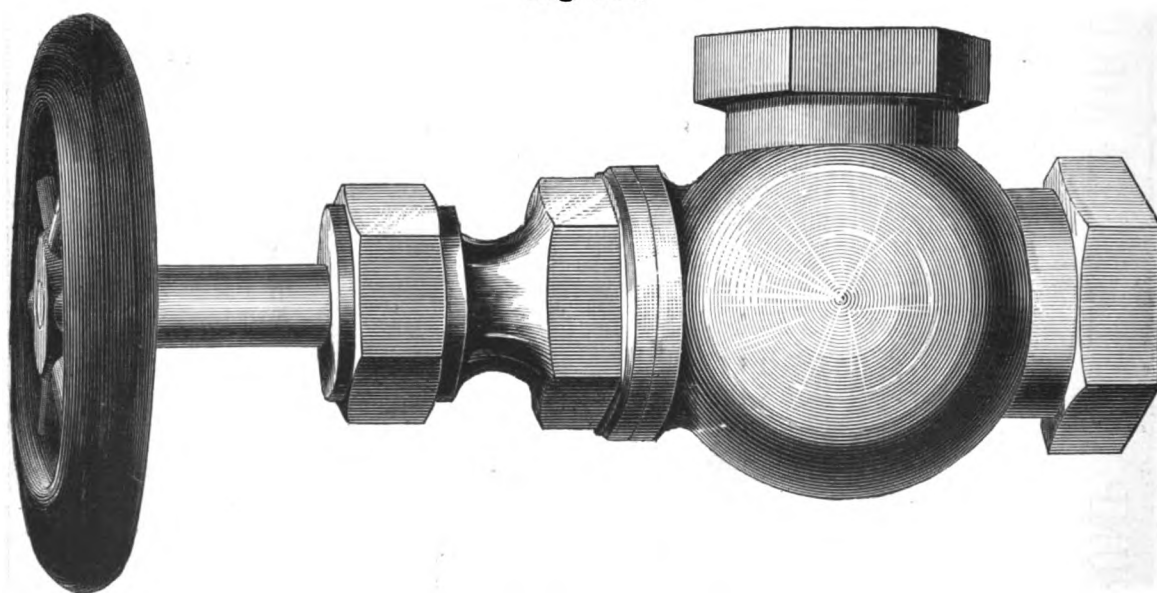
Fig. 121.



Sizes, 1½, 1¾, 2, 2½, 3, 3½, 4, 5, 6 inches.

ANGLE VALVE, IRON BODY, BRASS MOUNTED.

Fig. 122.

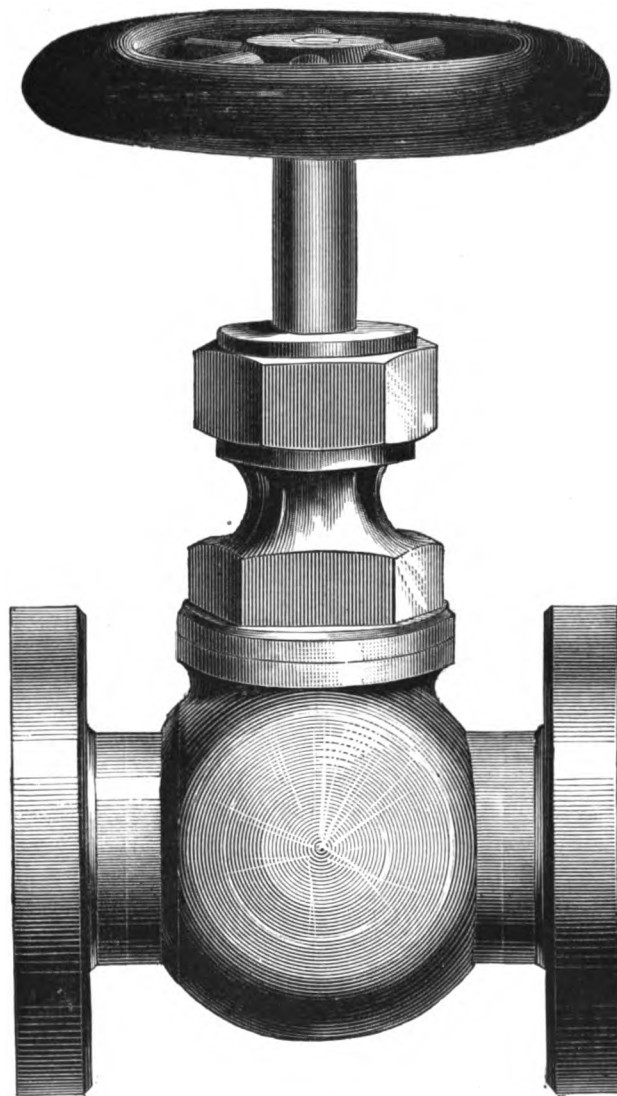


Sizes, 1½, 1¾, 2, 2½, 3, 3½, 4, 5, 6 inches.

A. CARR, MANUFACTURER, NEW YORK.

GLOBE VALVES FLANGED, IRON BODY, BRASS MOUNTED.

Fig. 123.



Sizes, - - - - - $1\frac{1}{4}$, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, 5, 6 inches.

Diameter of Flanges, - - - 5, $5\frac{1}{2}$, 6, 7, 8, 9, 10, 11, 12 "

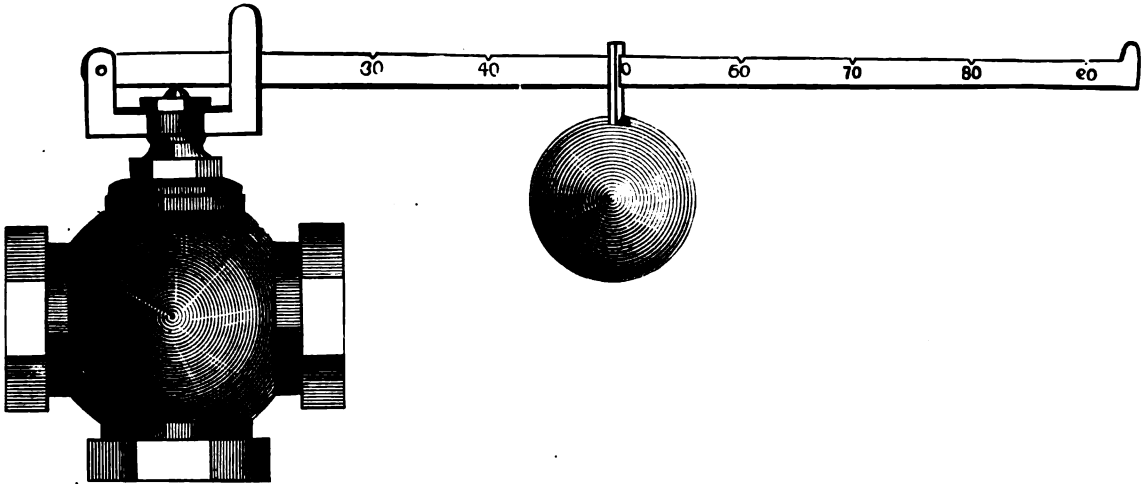
Between Faces of Flanges, $4\frac{1}{2}$, $4\frac{3}{4}$, 6, 7, $8\frac{1}{4}$, 9, $10\frac{1}{2}$, $12\frac{1}{2}$, $13\frac{1}{4}$ "

ANGLE VALVES FLANGED SAME SIZE.

SAFETY VALVES, IRON BODY.

BRASS MOUNTED.

Fig. 124.

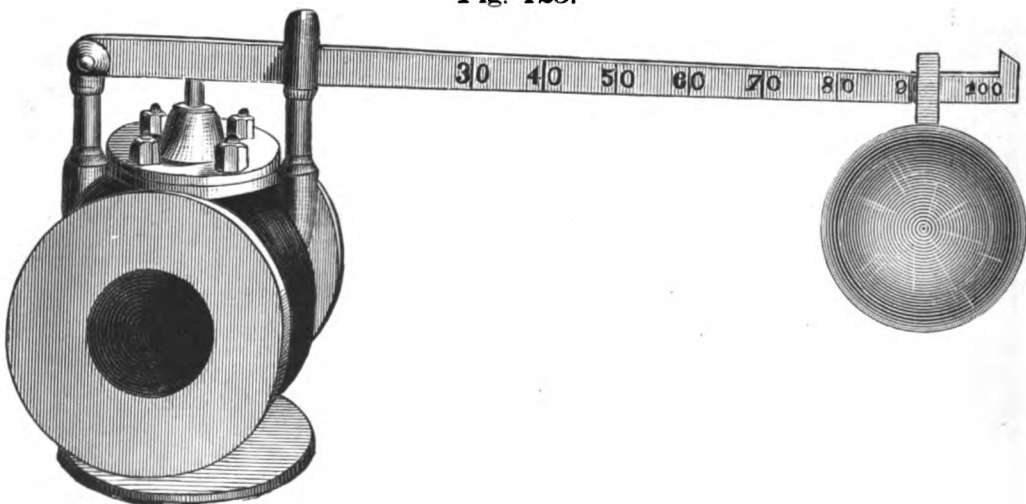


Sizes, $1\frac{1}{4}$, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4 inches.

SAFETY VALVES, IRON BODY, FLANGED.

BRASS MOUNTED.

Fig. 125.

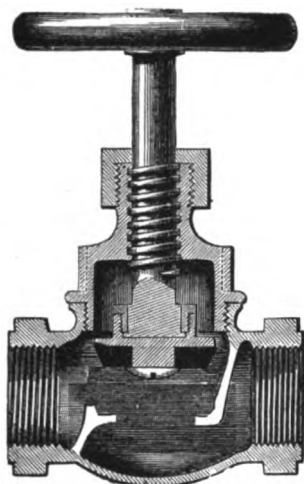


Sizes,	2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, 5, 6 inches.
Diameter of Flanges, -	6, 7, 8, 9, 10, 11, 12 "
Distance between do.	6, 7, $8\frac{1}{2}$, 9, $10\frac{1}{2}$, $12\frac{1}{2}$, $13\frac{1}{2}$ "

A. CARR, MANUFACTURER, NEW YORK.

JOHNSON VALVE.

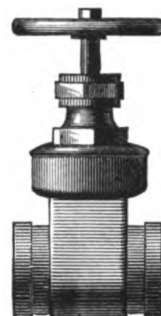
Fig. 126.



Brass and Iron Body, Brass Mounted. Sizes, $\frac{1}{8}$, $\frac{1}{4}$, $\frac{1}{2}$, 1, $1\frac{1}{2}$, $1\frac{1}{4}$, 2, 3, $3\frac{1}{2}$ inches.
 Flanged, - - - - - 2, 3, $3\frac{1}{2}$ "
 Iron Body with Flanges, Brass Mounted. Sizes, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, 5, 6, 7, 8 inches.

PEET VALVE.

Fig. 127.



LUDLOW VALVES.

BRASS.

Fig. 128.



IRON.

Fig. 129.



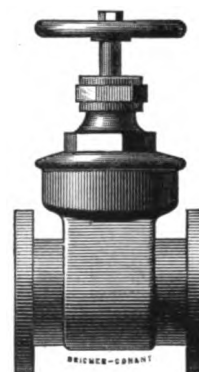
IRON WITH INDICATOR.

Fig. 130.



FLANGED.

Fig. 131.



Sizes, $\frac{1}{4}$, $\frac{1}{2}$, 1, $1\frac{1}{2}$, $1\frac{1}{4}$, 2 inches.

IRON VALVES, BRASS MOUNTED, OR ALL IRON.

Sizes, - - - - -	$2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20, 24 inches.
Diameter of Standard Flange, -	7, 8, $8\frac{1}{2}$, 9, 10, 11, 13, 16, 18, 20, 22, 24, 26, 30 "
Measurement from face to face of Flanges, - - - - -	$6\frac{1}{2}$, $7\frac{1}{2}$, 8, $9\frac{1}{2}$, $10\frac{1}{2}$, $11\frac{1}{2}$, 11, $12\frac{1}{2}$, $12\frac{1}{2}$, $13\frac{1}{2}$, $13\frac{1}{2}$, 14, 14, 14 "
Measurement from end to end of Hubs, - - - - -	- $10\frac{1}{2}$, - 12, 12, $12\frac{1}{2}$, $14\frac{1}{2}$, 14, $14\frac{1}{2}$, $15\frac{1}{2}$, $15\frac{1}{2}$, $15\frac{1}{2}$, $15\frac{1}{2}$, $15\frac{1}{2}$ "
Measurement from face to face to Screw Socket, - - - - -	$5\frac{1}{2}$, $8\frac{1}{2}$, 8, $8\frac{1}{2}$, $10\frac{1}{2}$, 11 - - - - - "

STEAM COCKS, BEST STEAM METAL.

THREE WAY COCK.

Fig. 133.

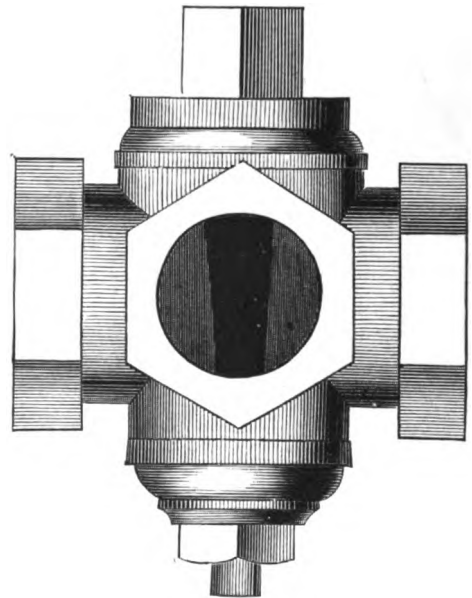
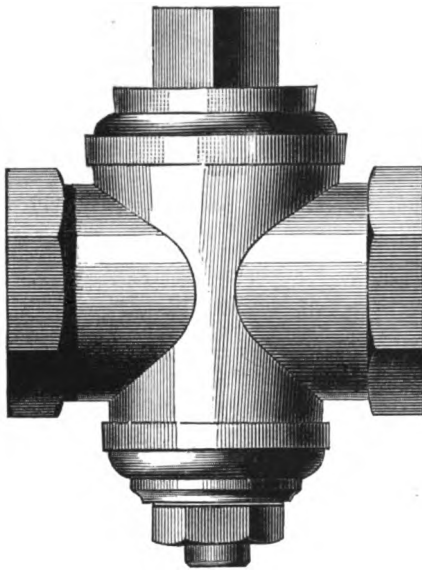


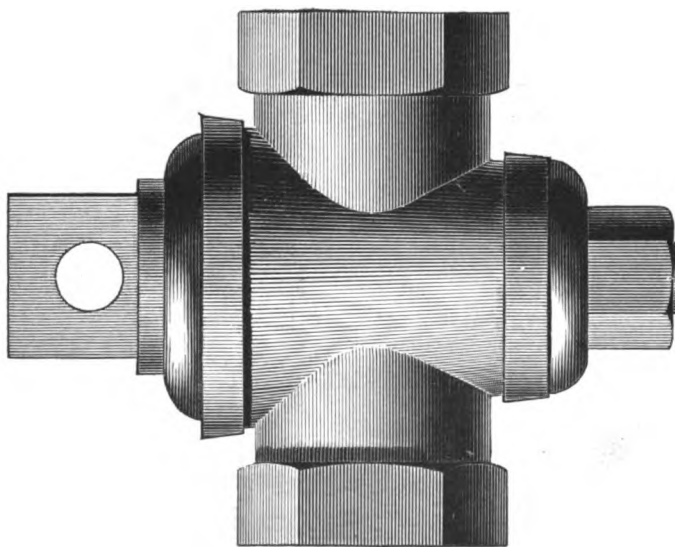
Fig. 132.



Sizes,	$\frac{1}{2}$,	$\frac{3}{4}$,	1,	1 $\frac{1}{2}$,	2,	2 $\frac{1}{2}$,	3,	3 $\frac{1}{2}$,	4 inches.
Diameter of Flanges,	4,	4 $\frac{1}{2}$,	5,	6,	7,	8,	9,	10	"
Between faces of Flanges,	3 $\frac{1}{2}$,	3 $\frac{3}{4}$,	4 $\frac{1}{8}$,	5 $\frac{1}{4}$,	6 $\frac{1}{2}$,	7 $\frac{1}{2}$,	9 $\frac{1}{4}$,	10 $\frac{1}{4}$	"

IRON COCKS.

Fig. 134.



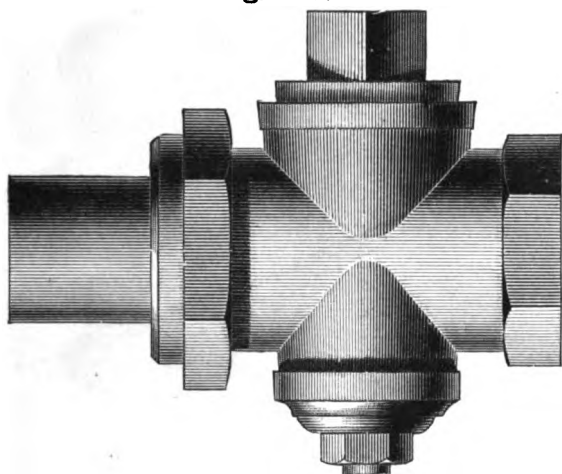
Sizes,	-	-	$\frac{1}{2}$,	1,	1 $\frac{1}{2}$,	2,	2 $\frac{1}{2}$,	3,	3 $\frac{1}{2}$,	4 inches.	
Diameter of Flanges,	-	-	4 $\frac{1}{2}$,	5,	6,	6 $\frac{1}{2}$,	7,	8,	8 $\frac{1}{2}$,	9	"
Between faces of Flanges,	3 $\frac{1}{2}$,	4 $\frac{1}{4}$,	4 $\frac{1}{2}$,	5 $\frac{1}{4}$,	6,	7 $\frac{1}{4}$,	8 $\frac{1}{4}$,	9 $\frac{1}{4}$,	11	"	

A. CARR, MANUFACTURER, NEW YORK.

GAS COCKS.

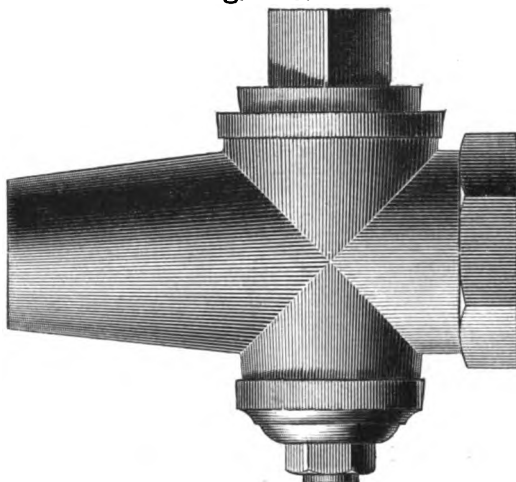
UNION METER COCK.

Fig. 135.



METER COCK, SOLDER END.

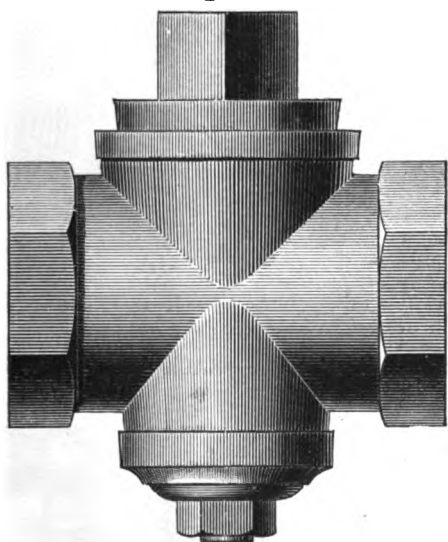
Fig. 136.



Sizes, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3 inches.

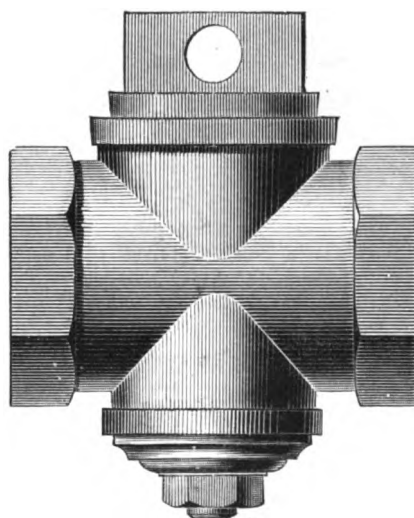
SERVICE COCK,
SQUARE HEAD.

Fig. 137.



SERVICE COCK,
FLAT HEAD.

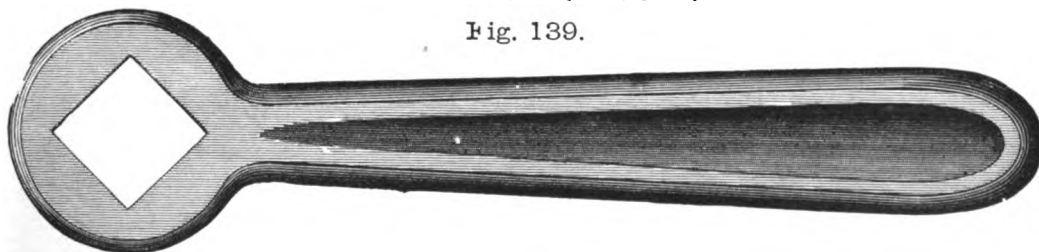
Fig. 138.



Sizes, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3 inches.

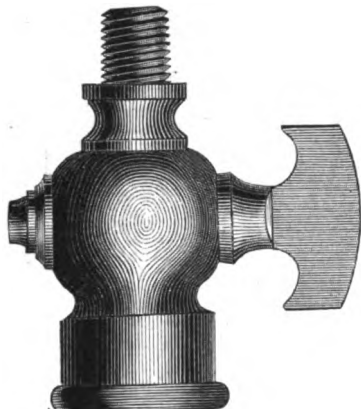
COCK WRENCH.

Fig. 139.



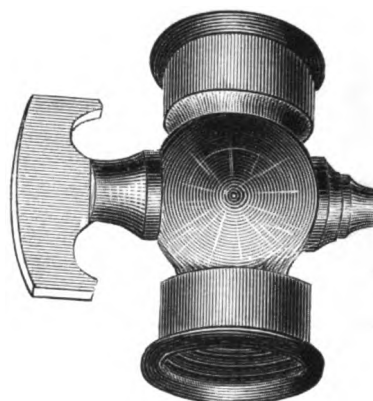
STREET LAMP COCKS, IRON PIPE SIZES.

Fig. 140.



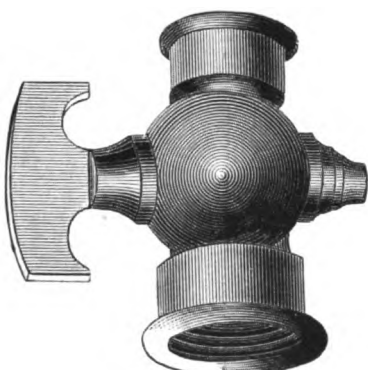
Sizes, $\frac{3}{8} \times \frac{1}{2}$, $\frac{1}{2} \times \frac{3}{4}$, $\frac{3}{4} \times 1$ inch.

Fig. 141.



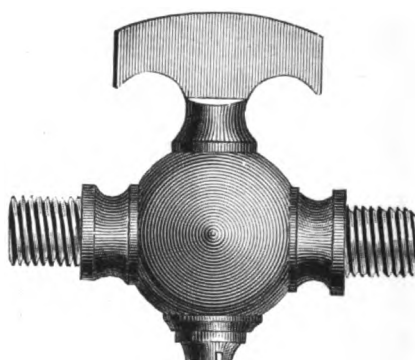
Size, $\frac{3}{8} \times \frac{3}{4}$ inch.

Fig. 142.



Size, $\frac{3}{8} \times \frac{1}{2}$ inch.

Fig. 143.



Sizes, $\frac{1}{2} \times \frac{1}{2}$, $\frac{1}{2} \times \frac{3}{4}$, $\frac{3}{4} \times 1$ inch.

2-LIGHT PENDANT COCK.

Fig. 144.



$\frac{3}{8}$ Iron to $\frac{3}{8}$ Iron.
 $\frac{3}{8}$ " $\frac{1}{2}$ "
 $\frac{3}{8}$ " $\frac{3}{4}$ "
 $\frac{1}{2}$ " 1 "
 7-16 Brass to 5-16 Brass.

L PENDANT COCK.

Fig. 145.



$\frac{1}{2}$ Iron to $\frac{1}{2}$ Iron.
 $\frac{3}{8}$ " $\frac{1}{2}$ "
 $\frac{3}{8}$ " $\frac{3}{4}$ "

BRACKET COCK.

Fig. 146.



$\frac{3}{8}$ Iron to $\frac{3}{8}$ Brass.
 $\frac{3}{8}$ " $\frac{1}{2}$ "
 $\frac{3}{8}$ " $\frac{3}{4}$ "
 $\frac{3}{8}$ " 1 " heavy.

A. CARR, MANUFACTURER, NEW YORK.

FIXTURE COCKS.

UNIVERSAL SWING JOINT.

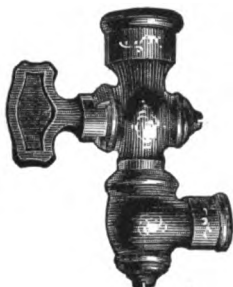
Fig. 147.



$\frac{1}{8}$ to 5-16 Brass.
 $\frac{1}{8}$ Iron to $\frac{1}{8}$ "
 $\frac{1}{8}$ " $\frac{1}{8}$ "
 $\frac{1}{8}$ " $\frac{1}{8}$ " heavy.
 $\frac{1}{8}$ " $\frac{1}{8}$ Iron.
 $\frac{1}{8}$ " $\frac{1}{8}$ " heavy.
 $\frac{1}{8}$ " $\frac{1}{8}$ "
 $\frac{1}{8}$ " $\frac{1}{8}$ "

REVOLVING COCKS.

Fig. 148.



$\frac{3}{8}$ Iron to $\frac{3}{8}$ Brass.
 $\frac{3}{8}$ " $\frac{1}{4}$ Iron.
 $\frac{1}{4}$ " $\frac{1}{4}$ "
 " $\frac{1}{4}$ "

Universal Revolving Cock, $\frac{1}{4}$ to $\frac{1}{4}$.

MIDDLE SWINGS.

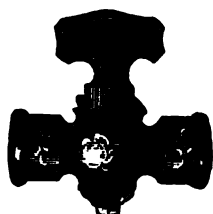
Fig. 149.



$\frac{1}{8}$ Iron to $\frac{1}{8}$ Iron.
 $\frac{1}{8}$ " $\frac{1}{8}$ "
 $\frac{1}{8}$ Brass to $\frac{1}{8}$ Brass.
 $\frac{3}{8}$ " $\frac{3}{8}$ "
 7-16 " 7-16 "

CHANDELIER COCK.

Fig 150.



$\frac{1}{8}$
 $\frac{1}{8}$ Iron to $\frac{1}{8}$ Iron.
 $\frac{1}{8}$ " $\frac{1}{8}$ "
 $\frac{3}{8}$ " $\frac{3}{8}$ "
 5-16 Brass to 5-16 Brass.
 $\frac{1}{8}$ Iron to $\frac{3}{8}$ Iron.
 $\frac{1}{8}$ " $\frac{1}{8}$ "
 $\frac{3}{8}$ " $\frac{3}{8}$ Brass.

PILLAR COCK.

Fig. 151.



$\frac{1}{8}$ Iron to Burner.
 $\frac{1}{8}$ " "
 $\frac{3}{8}$ " "
 $\frac{1}{4}$ " "
 $\frac{1}{4}$ " "
 $\frac{3}{8}$ " "

SIDE NOZZLE.

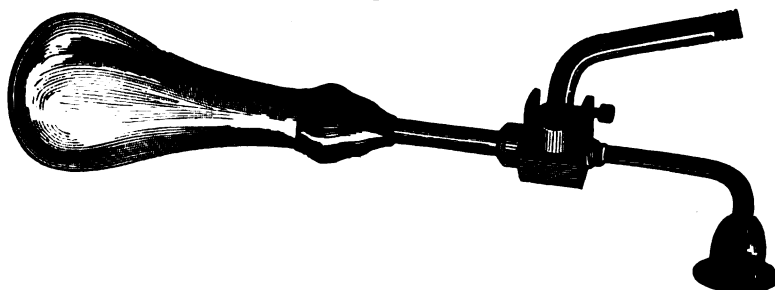
Fig. 152.



5-16 Brass.
 $\frac{3}{8}$ "
 7-16 "
 $\frac{1}{8}$ "
 $\frac{1}{8}$ Iron.
 $\frac{3}{8}$ "

CIGAR LIGHTER.

Fig. 153.

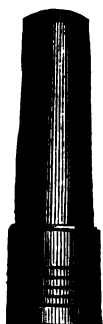


GAS BURNERS.

IMPERIAL.

Fig. 154.

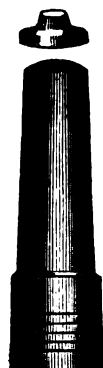
No. 1.



YOUNG AMERICA.

Fig. 155.

No. 2.



No. 3.

AMERICAN BURNER.

Fig. 156.



DOUBLE OR CYLINDER BURNER.

No. 4.

Fig. 157.

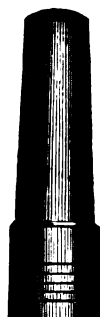
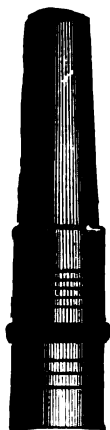


Fig. 158.



Fig. 159.



Fig. 160.



Fig. 161.



Lava Tips furnished in plain pillars as above, or in Patent American, Young America or Cylinder Burners. Also, without Pillars,

DROP LIGHT SOCKET.

Fig. 162.



PATENT COUPLING FOR CONNECTING FLEXIBLE HOSE TO PORTABLES.

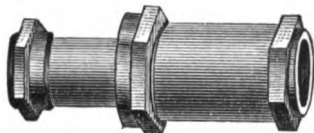
Fig. 163.



A. CARP, MANUFACTURER, NEW YORK.

EXPANSION JOINT, BEST STEAM METAL. SCREWED FOR IRON PIPE.

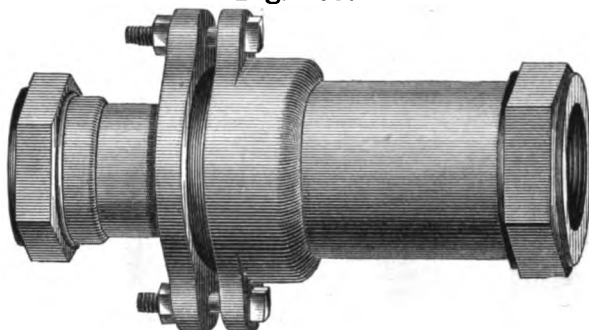
Fig. 164.



Sizes, $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{2}$, $1\frac{3}{4}$, 2, $2\frac{1}{2}$, 3 inches.

IRON BODY, BEST STEAM METAL SLEEVE. SCREWED FOR IRON PIPE.

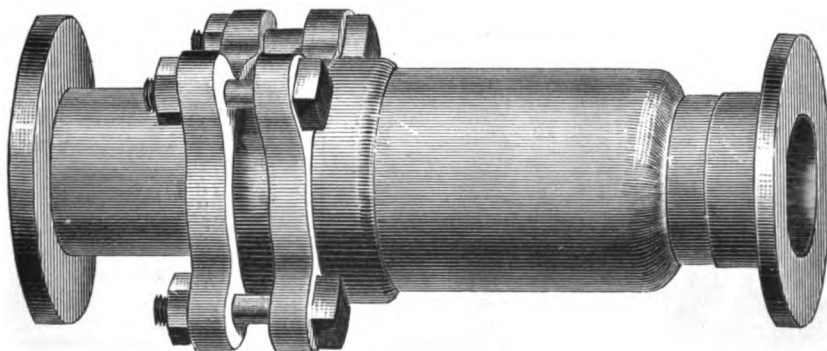
Fig. 165.



Sizes, 2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, 5, 6 inches.

IRON BODY, BEST STEAM METAL SLEEVE. FLANGED.

Fig. 166.

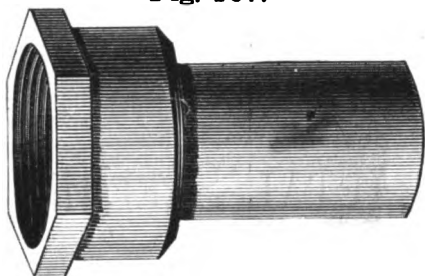


Sizes, - - - - - 3, $3\frac{1}{2}$, 4, 5, 6, 8 inches.
Diameter of Flanges, 6, $6\frac{1}{2}$, $7\frac{1}{2}$, $9\frac{1}{2}$, $10\frac{1}{2}$, 18 "

BRASS FITTINGS FOR IRON PIPE, BEST STEAM METAL.

SOLDERING UNION.

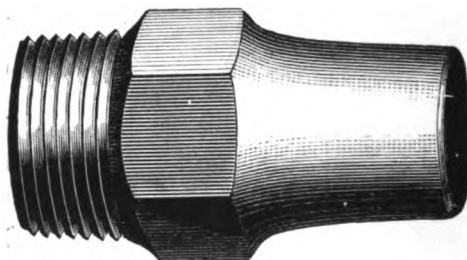
Fig. 167.



Sizes, $\frac{1}{2}$, $\frac{3}{4}$, 1 , $1\frac{1}{2}$, 2 , $2\frac{1}{2}$, 3 inches.

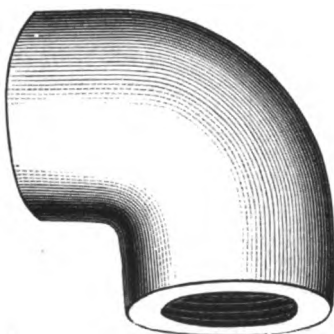
SOLDERING NIPPLE.

Fig. 168.



ELBOW.

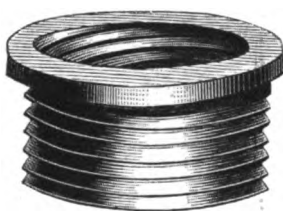
Fig. 169.



Sizes, $\frac{1}{2}$, $\frac{3}{4}$, 1 , $1\frac{1}{2}$, 2 inches.

BUSHING.

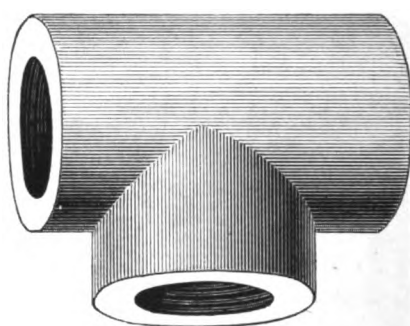
Fig. 170.



Sizes, $\frac{1}{2} \times \frac{1}{2}$, $\frac{3}{4} \times \frac{3}{4}$, 1×1 , $1\frac{1}{2} \times 1\frac{1}{2}$, 2×2 inches.

TEE.

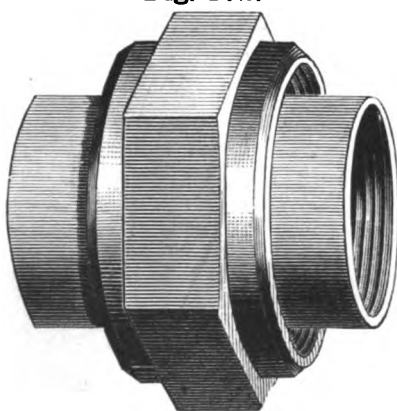
Fig. 171.



Sizes, $\frac{1}{2}$, $\frac{3}{4}$, 1 , $1\frac{1}{2}$, 2 inches.

UNION.

Fig. 172.



Sizes, $\frac{1}{2}$, $\frac{3}{4}$, 1 , $1\frac{1}{2}$, 2 inches.

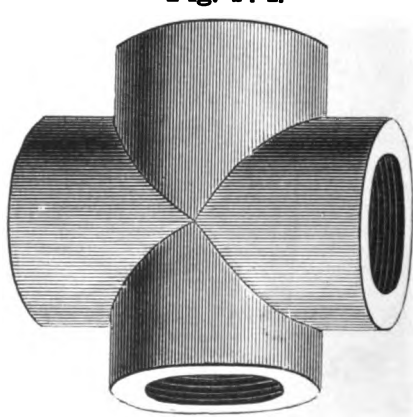
NIPPLE.

Fig. 173.



CROSS.

Fig. 174.



Sizes, $\frac{1}{2}$, $\frac{3}{4}$, 1 , $1\frac{1}{2}$, 2 inches.

A. CARR, MANUFACTURER, NEW YORK.

IRON STEAM FITTINGS.

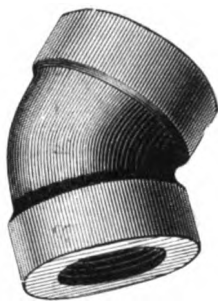
ELBOW.

Fig. 175.



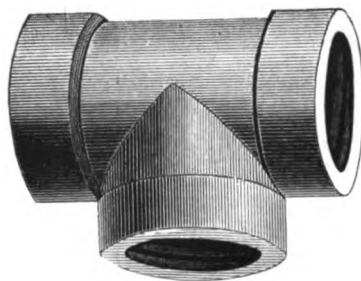
ELBOW 45°.

Fig. 176.



TEE.

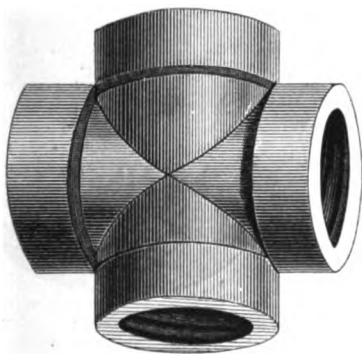
Fig. 177.



Sizes $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, 5, 6 inches.

CROSS.

Fig. 178.



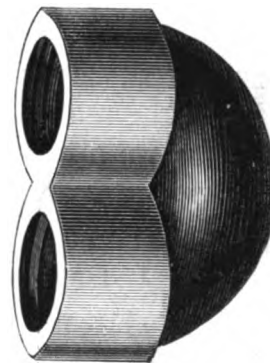
BRANCH.

Fig. 179.



RETURN BEND.

Fig. 180.



Sizes, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4 inches.

BUSHING.

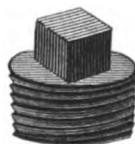
Fig. 181.



Reducing from 1 to 4 sizes.

P L U G .

Fig. 182.



Sizes, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, 5, 6 inches.

LOCK NUT.

Fig. 183.



IRON STEAM FITTINGS.

MALLEABLE UNION.

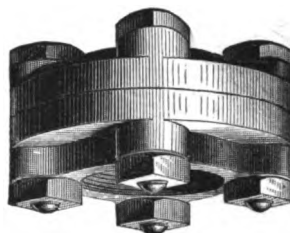
Fig. 184.



Sizes, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3 inches.

FLANGE UNION.

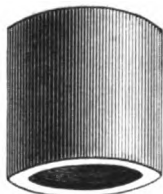
Fig. 185.



Sizes, $\frac{1}{4}$, $\frac{3}{8}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, 5, 6 inches.

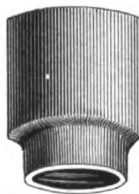
PLAIN COUPLING.

Fig. 186.



REDUCING COUPLING.

Fig. 187.



Sizes, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, 5, 6 inches.

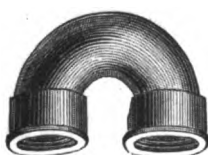
R. & L. COUPLING.

Fig. 188.



OPEN PATTERN RETURN BEND.

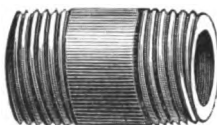
Fig. 189.



All sizes, $\frac{1}{4}$ to 4 inches.

NIPPLE.

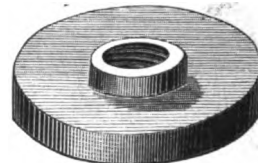
Fig. 190.



All sizes, $\frac{1}{4}$ to 6 inches.

FLANGE.

Fig. 191.



IRON PIPE FLANGES.

Size of Pipe,	$\frac{1}{4}$	$\frac{3}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	5	6
Diameter of Flanges, inches,												
12						0 00	0 00	0 00	0 00	0 00	0 00	0 00
11						0 00	0 00	0 00	0 00	0 00	0 00	0 00
10						0 00	0 00	0 00	0 00	0 00	0 00	0 00
$9\frac{1}{2}$					0 00	0 00	0 00	0 00	0 00	0 00	0 00	....
9				0 00	0 00	0 00	0 00	0 00	0 00	0 00	....	....
$8\frac{1}{2}$			0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	....	....
8			0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	....	....
$7\frac{1}{2}$		0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	....	....	....
7		0 00	0 00	0 00	0 00	0 00	0 00	0 00	....	....	....	....
$6\frac{1}{2}$		0 00	0 00	0 00	0 00	0 00	0 00	....	....	....	....	....
6		0 00	0 00	0 00	0 00	0 00	....	....	....	....	....	....
$5\frac{1}{2}$		0 00	0 00	0 00	0 00	....	....	....	....	....	....	....
5		0 00	0 00	0 00	0 00	....	....	....	....	....	....	....
$4\frac{1}{2}$		0 00	0 00	0 00	0 00	....	....	....	....	....	....	....
4		0 00	0 00	0 00	....	....	....	....	....	....	....	....

IRON STEAM FITTINGS.

BRANCH TEE, LARGE RUN.

Fig. 192.



1 inch Branch, $2\frac{1}{2}$ inch Centres.
 $1\frac{1}{2}$ " " 3 " "
 Inlet, $1\frac{1}{2}$ inch. Discharge, $1\frac{1}{2}$ inch.
 Any number of Branches from
 2 to 12.
 $1\frac{1}{2}$ inch, 12 inch Branches.
 Inlet 3 inches. Discharge, 2 inches.

BRANCH TEE.

Fig. 193.



$\frac{3}{4}$ inch Branch, $2\frac{1}{2}$ inch Centres.
 1 " " $2\frac{1}{2}$ " "
 Any number of Branches from 2 to 6.

HOOK PLATE.

Fig. 194.



$\frac{3}{4}$ inch Hook, $2\frac{1}{2}$ inch Centres.
 1 " " $2\frac{1}{2}$ " "
 Any number of Hooks from 1 to 12.

RING PLATE.

Fig. 195.



For $\frac{3}{4}$ inch and 1 inch pipe.
 1 to 10 Rings.

EXPANSION PLATE.

Fig. 196.



1 to 10 Plates.

COIL STANDS.

Fig. 197.



For $\frac{3}{4}$ inch and 1 inch pipe.
 From 4 to 20 pipes high.

PIPE HOOK.

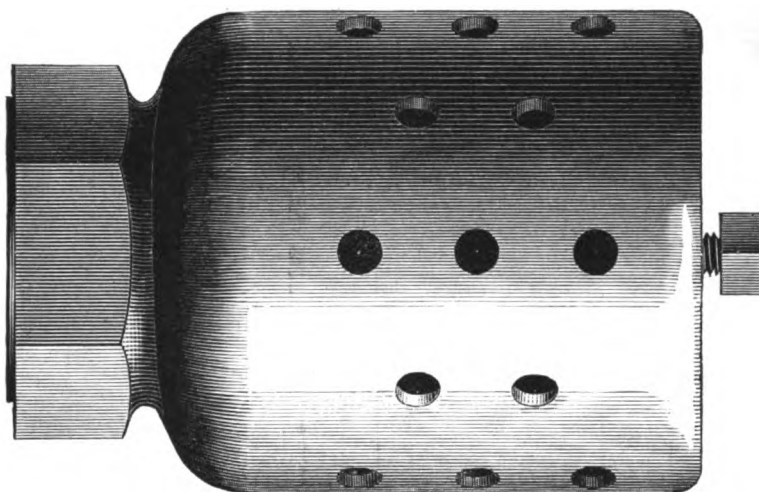
Fig. 198.



From $\frac{3}{4}$ inch to 2 inches.

FOOT VALVE AND STRAINER.

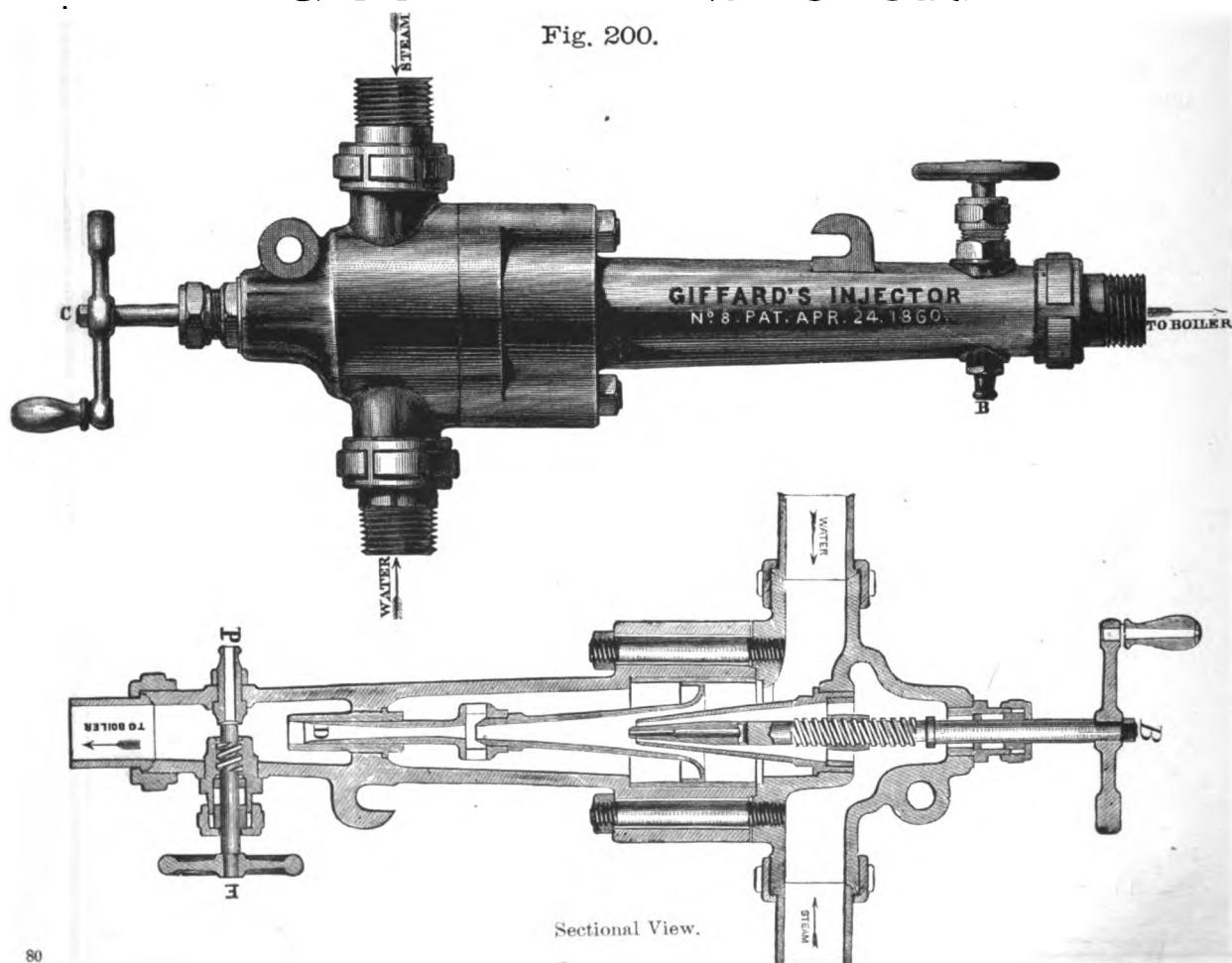
Fig. 199.



For Lead and Copper Pipe, $\frac{1}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, 2 inches.
For Iron Pipe, $\frac{1}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, 2, $2\frac{1}{4}$, 3, $3\frac{1}{4}$, 4, 5, 6 inches.

GIFFARD'S INJECTOR.

Fig. 200.

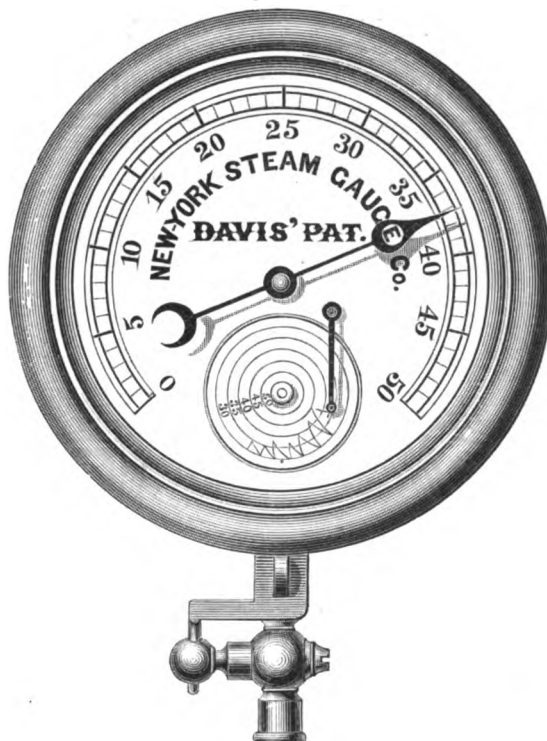


A. CARR, MANUFACTURER, NEW YORK.

STEAM GAUGES.

Fig. 201.

DAVIS' PATENT

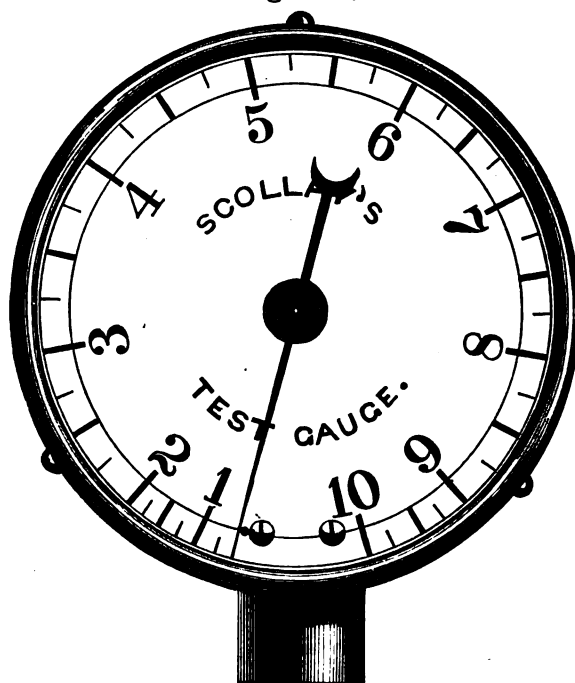


RECORDING GAUGE.

Fig. 202.

GAS FITTERS'

NO MERCURY.



TEST GAUGE.

NO RUBBER DIAPHRAM.

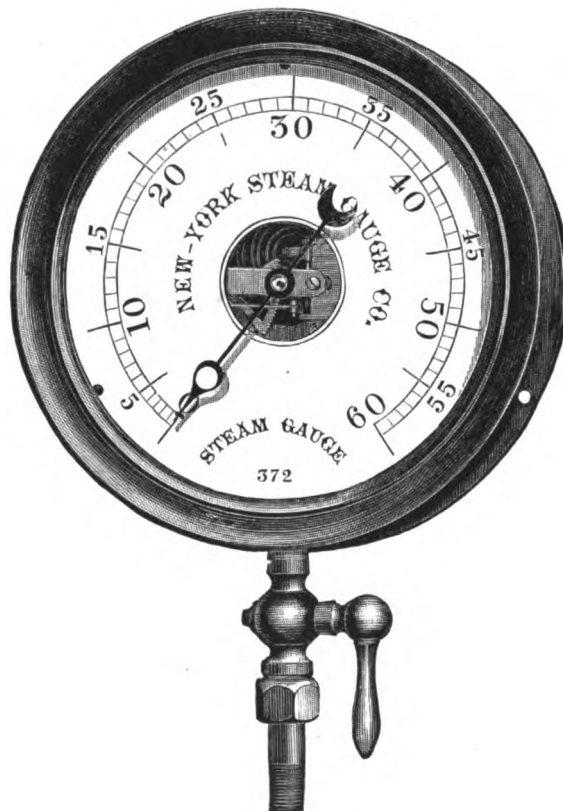
Full Size of Gauge.

This Gauge does away with all the inconveniences of the Mercurial Column, such as *Loss of Mercury, Leakage, Breakage of Tubes*, and the necessity of always keeping it in a vertical position.
This Gauge can be carried conveniently in the pocket—it is *Accurate, Sensitive, Durable*, and will work in any position; it has a cover to protect the face, and screen to prevent the accumulation of dust, etc., behind the spring.

STEAM GAUGES.

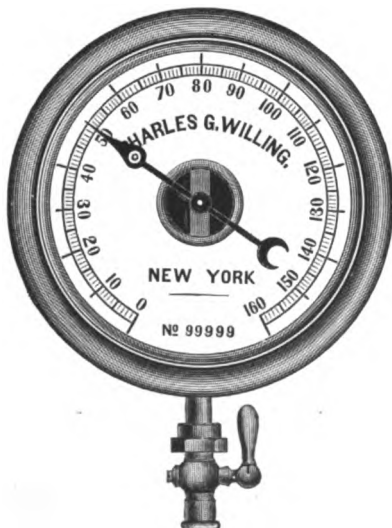
NEW YORK STEAM GAUGE.

Fig. 203.



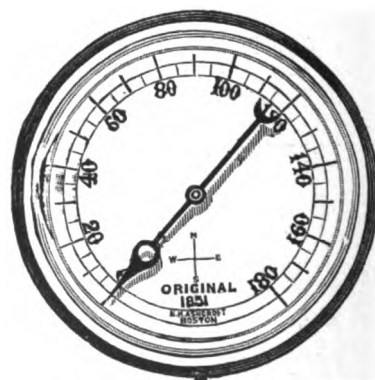
WILLING'S STEAM GAUGE.

Fig. 204.



ASHCROFT'S STEAM GAUGE.

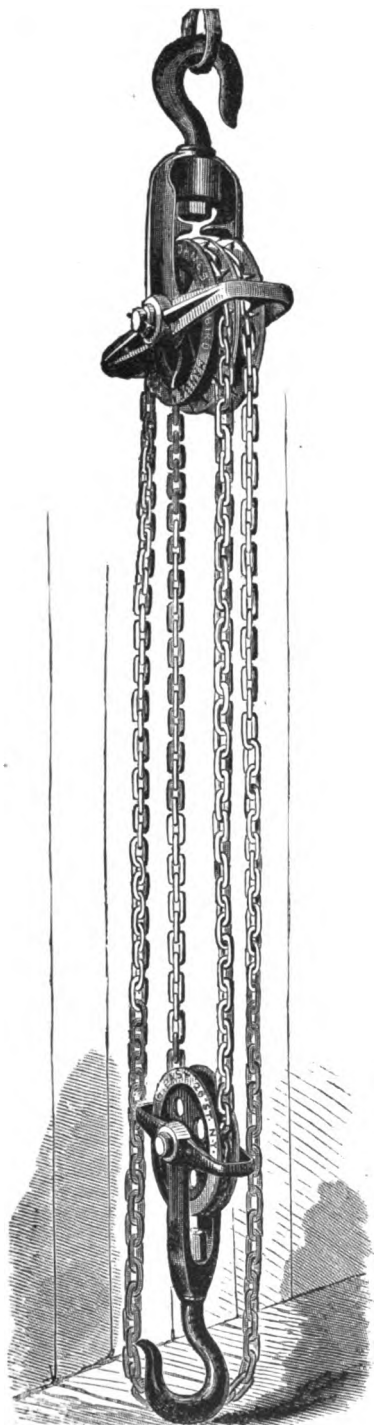
Fig. 205.



A. CARP, MANUFACTURER, NEW YORK.

DIFFERENTIAL PULLEY BLOCKS.

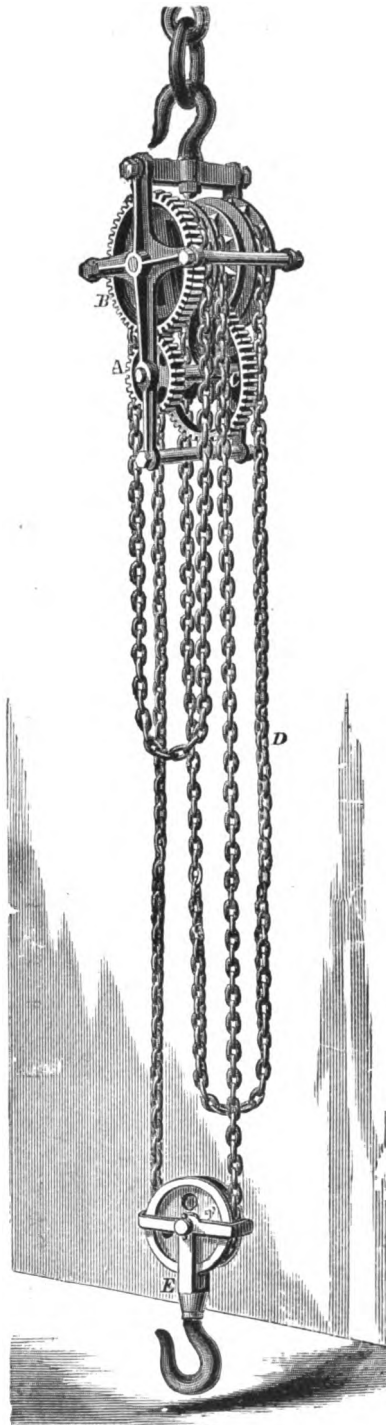
Fig. 205.



One man can hoist from 500 to 1000 lbs., and the Block will hold the weight at any point.

Sizes, $\frac{1}{2}$, 1, $1\frac{1}{2}$, 2 tons.

Fig. 206.



One man can raise from 1 to 3 tons, and the Block will hold the weight at any point.

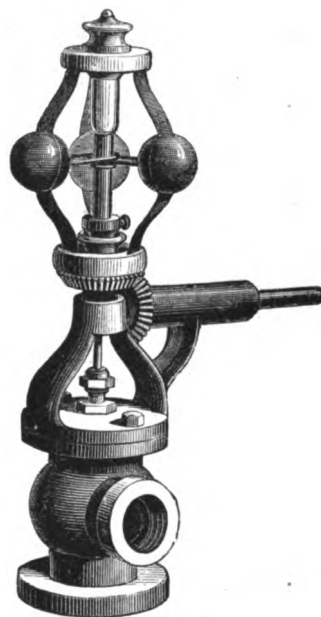
Sizes, 1, 2, 3, 4, 5, 6 tons.

STEAM ENGINE GOVERNORS.

PICKERING'S IMPROVED SPRING GOVERNOR.

FINISHED AND PLAIN.

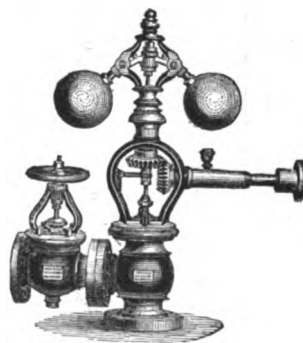
Fig. 206.



Size of Pipe, $\frac{1}{2}$, 1, $1\frac{1}{2}$, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, 5, 6, 7, 8, 10 inches.

JUDSON'S GOVERNOR.

Fig. 207.



Size of Pipe, $\frac{1}{2}$, 1, $1\frac{1}{2}$, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, $4\frac{1}{2}$, 5, 6, 7, 8, 9 inches.

CARR'S POSITIVE CIRCULATING RADIATORS.

(For Sectional View and Description, see Page 13.)

CIRCULAR IN HALVES FOR COLUMN.

CIRCULAR.

Fig. 208.

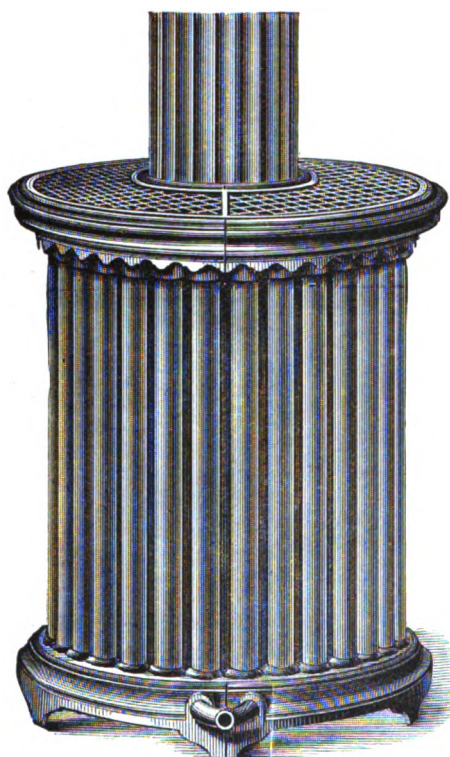
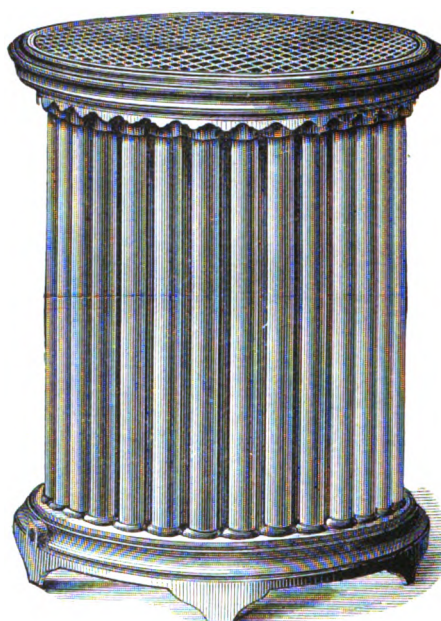


Fig. 209.



No.	Number of Tubes.	Diameter.		Diameter of opening for Column.	Size of Steam Pipe.		Size of Return Pipe.
		Ft.	Inch.		Inches.	Inches.	
1	16	1	4 1/4	8	1	3/4	1
2	40	1	10	8	1	3/4	1
3	72	2	3	8	1 1/4	1	1 1/4
4	112	2	8 1/2	8	1 1/4	1	1 1/4
5	94	1	10	12	1	3/4	1
6	56	2	3	12	1 1/4	1	1 1/4
7	96	2	8 1/2	12	1 1/4	1	1 1/4
8	144	3	2	12	1 1/4	1 1/4	1 1/4
9	200	3	7 1/2	12	1 1/4	1 1/4	1 1/4
10	82	2	3	16	1	3/4	1
11	72	2	8 1/2	16	1 1/4	1	1 1/4
12	120	3	2	16	1 1/4	1 1/4	1 1/4
13	176	3	7 1/2	16	1 1/4	1 1/4	1 1/4

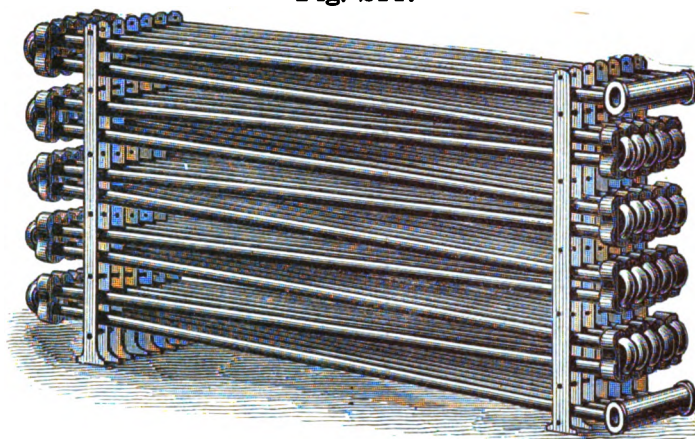
No.	Number of Tubes.	Diameter of Base.		Size of Steam Pipe.	Size of Return Pipe.
		Ft.	Inch.		
1	16	1	4 1/4	1	3/4
2	24	1	4 1/4	1	3/4
3	24	1	10	1	3/4
4	32	2	3	1 1/4	1 1/4
5	40	1	10	1	3/4
6	40	2	8 1/2	1 1/4	1 1/4
7	48	3	2	1 1/4	1 1/4
8	56	2	3	1	3/4
9	56	3	7 1/2	1 1/4	1 1/4
10	72	2	3	1 1/4	1 1/4
11	72	2	8 1/2	1 1/4	1 1/4
12	88	3	2	1 1/4	1 1/4
13	96	2	8 1/2	1 1/4	1 1/4
14	104	3	7 1/2	1 1/4	1 1/4
15	112	2	8 1/2	1 1/4	1 1/4
16	120	3	2	1 1/4	1 1/4
17	144	3	2	1 1/4	1 1/4
18	144	3	7 1/2	1 1/4	1 1/4
19	160	3	2	1 1/4	1 1/4
20	176	3	7 1/2	1 1/4	1 1/4
21	200	3	7 1/2	1 1/4	1 1/4
22	216	3	7 1/2	1 1/4	1 1/4

HEIGHT 36 INCHES.

A. CARR, MANUFACTURER, NEW YORK.

RETURN BEND, OR BOX COILS.

Fig. 211.



Length of Coil, $\frac{1}{4}$ or 1 inch pipe, 2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, $4\frac{1}{2}$, 5, $5\frac{1}{2}$, 6, 7, 8, 9, 10, 12 feet.

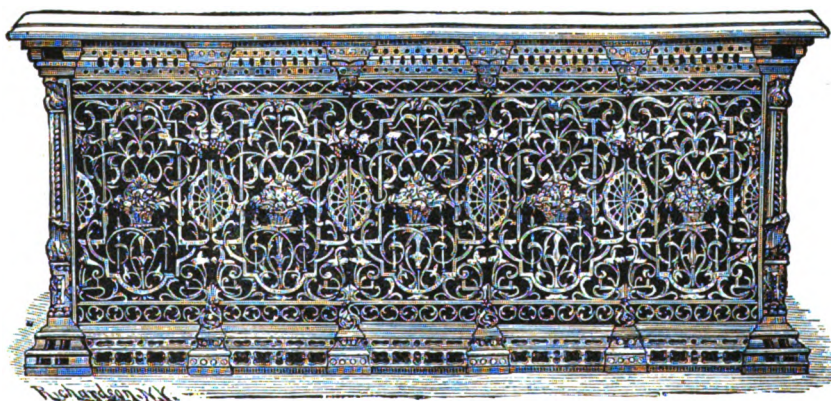
ORNAMENTAL SCREENS.

FOR COILS OF STEAM PIPE.

Height under Marble Top, $81\frac{1}{2}$ inches.

No. 1

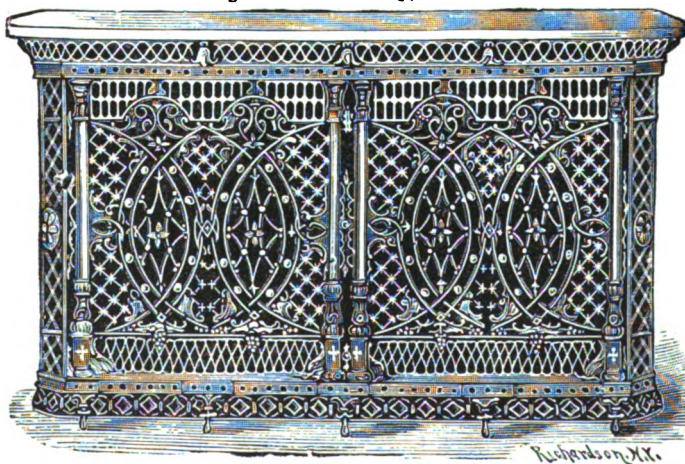
Fig. 212.



Height under Marble Top, 32 inches.

No. 2

Fig. 213.



Gold Bronzed.
Artistic Bronze.

Grained to order.
White.

Chocolate tipped with Bronze.
Chocolate with figures Bronzed in Relief.

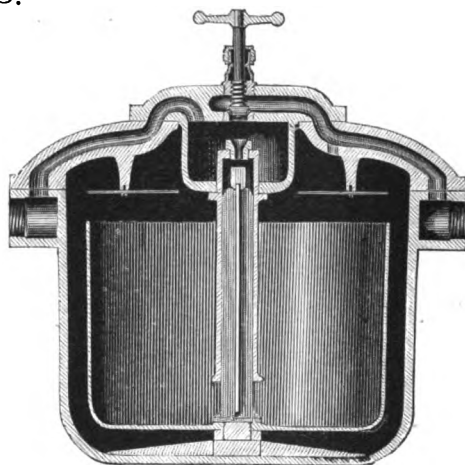
Unfinished Iron.
Marble Top.

STEAM TRAPS

FOR EXHAUSTING THE WATER OF CONDENSATION.

NASON'S.

Fig. 214.



Number,	1.	2.	3.	4.	5.
Size of Pipe Connections,	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{2}$	$1\frac{1}{2}$ inches.
Diameter of Cylinder,	8	$10\frac{1}{2}$	12	14	18 "
Height to top of Cover,	8	10	12	14	$15\frac{1}{2}$ "
Greatest number of square feet to which it should be applied,	350	900	1400	2000	3500 "

MAXIM STEAM TRAP,

FOR REMOVING AIR & WATER OF CONDENSATION, AND RETAINING THE STEAM IN STEAM APPARATUS.

Fig. 215.

COIL HEATER,

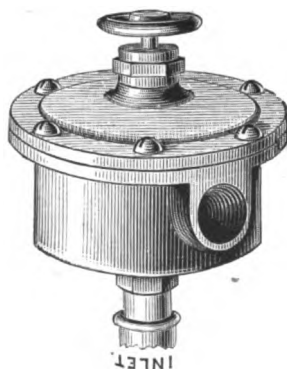
FOR

HEATING FEED-WATER FOR BOILERS.

Fig. 216.



Size of Pipe, $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{2}$, 1 $\frac{1}{2}$, 2 inches.

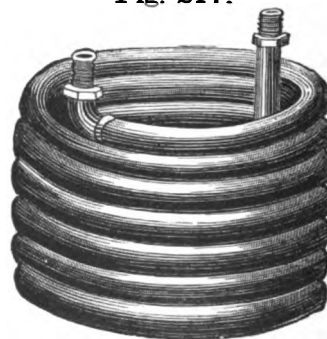


No. 1, will drain 2,000 feet of 1 inch pipe.

No. 2, will drain 5,000 feet of 1 inch pipe.

HEATER COIL.

Fig. 217.



Size of Pipe, $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{2}$, 1 $\frac{1}{2}$, 2 inches.

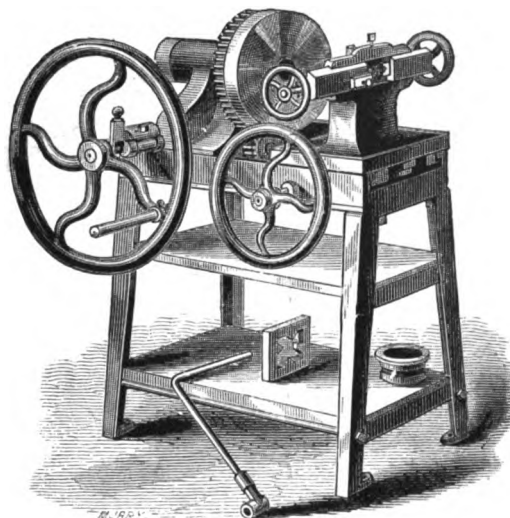
A. CARE, MANUFACTURER, NEW YORK.

STEAM AND GAS FITTERS' TOOLS.

IMPROVED MACHINE

FOR CUTTING AND SCREWING STEAM AND GAS PIPES, BY HAND OR POWER.

Fig. 218.



Cutting and Screwing from $\frac{1}{4}$ inch to 2 inch pipe, with Universal Chuck, Fly Wheel and Dies, complete.

STOCK PLATES AND DIES.

No. 1, MALLEABLE IRON SCREWING STOCK.

SOLID PLATE AND DIES.

Fig. 219.

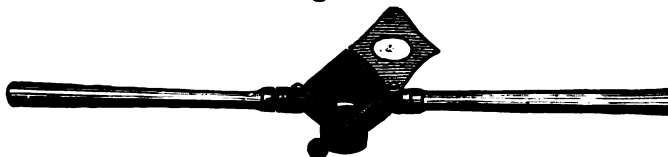


With Solid Plate and Dies, cutting $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ and 1 inch.

No. 2, MALLEABLE IRON SCREWING STOCK.

WITH WROUGHT IRON SCREW HANDLE.

Fig. 220.



With Solid Dies and Guides, cutting $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ and 1 inch. Left hand Dies to order.

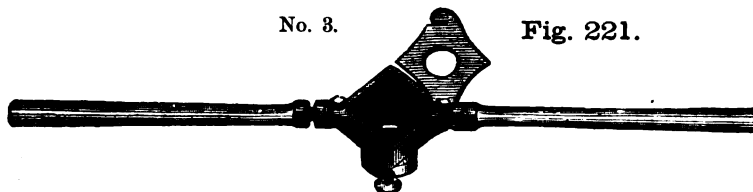
STEAM AND GAS FITTERS' TOOLS.

STOCKS, PLATES, DIES, &c

MALLEABLE IRON SCREWING STOCK, WITH WROUGHT IRON SCREW HANDLES.

No. 3.

Fig. 221.

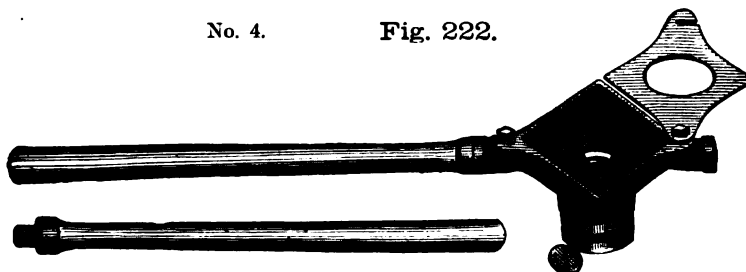


With Solid Dies and Guides, cutting $\frac{3}{4}$, 1, and $1\frac{1}{4}$ inch. Left Hand Dies to order. Extra Bushings.

MALLEABLE IRON SCREWING STOCK, WITH WROUGHT IRON SCREW HANDLES AND DRIVE SCREW.

No. 4.

Fig. 222.

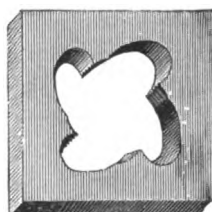


With Solid Dies and Guides, cutting $1\frac{1}{4}$, $1\frac{1}{2}$, and 2 inches. Left Hand Dies to order. Extra Bushings.

No. 5, With Solid Dies and Guides, cutting $2\frac{1}{2}$ and 3 inches.

DIE.

Fig. 224.



PIPE TAP.

Fig. 223.



REAMER.

Fig. 225.

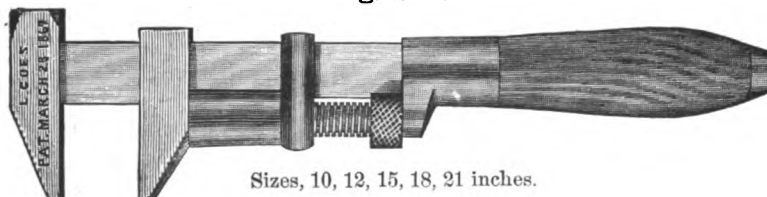


Size of Taps and Dies, Right or Left Hand, $\frac{1}{8}$, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3 inches.

SCREW WRENCHES.

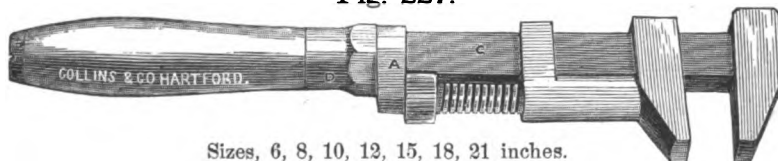
BLACK.

Fig. 226.



Sizes, 10, 12, 15, 18, 21 inches.

Fig. 227.



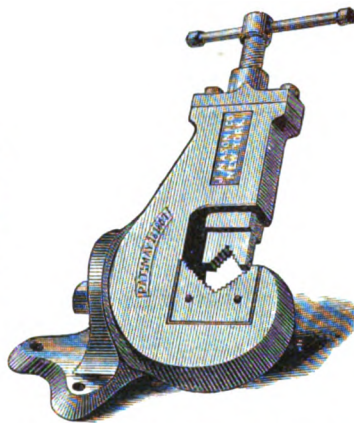
Sizes, 6, 8, 10, 12, 15, 18, 21 inches.

A. CARR, MANUFACTURER, NEW YORK.

STEAM AND GAS FITTERS' TOOLS.

PIPE VISE.

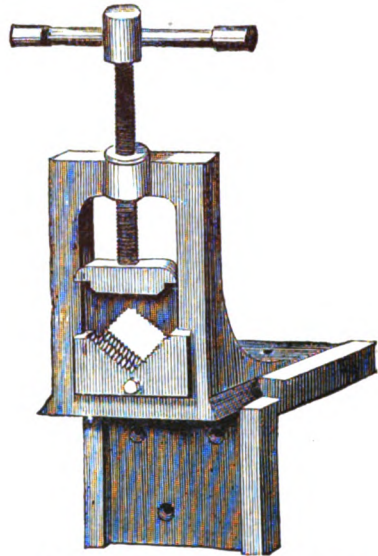
Fig. 229.



No. 1, holds pipe from $\frac{1}{8}$ to $1\frac{1}{4}$ inch.
 " 2, " " " $\frac{1}{8}$ " 2 "
 " 3, " " " $\frac{1}{4}$ " 3 "

PIPE VISE.

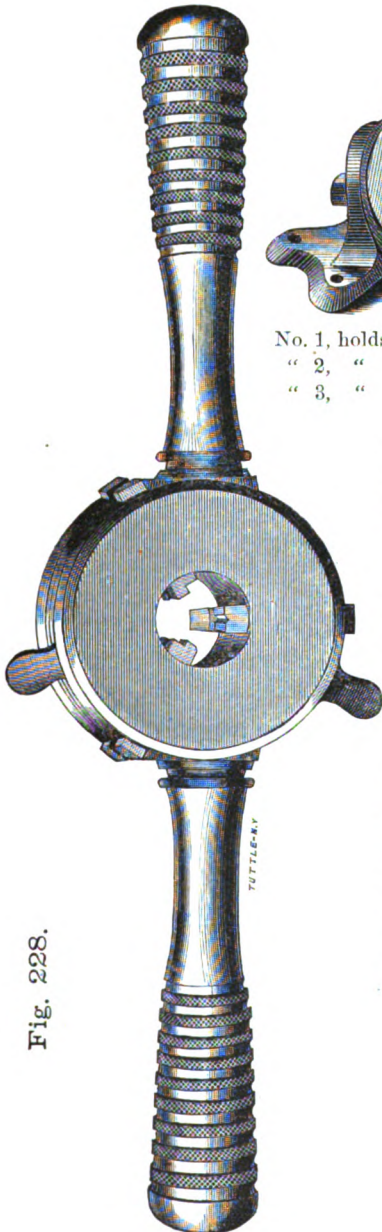
Fig. 230.



No. 1, holds pipe from $\frac{1}{4}$ to 2 inch.
 " 2, " " " $\frac{1}{4}$ " 3 "
 " 3, " " " $\frac{1}{2}$ " 4 "

PATENT SCROLL DIE.

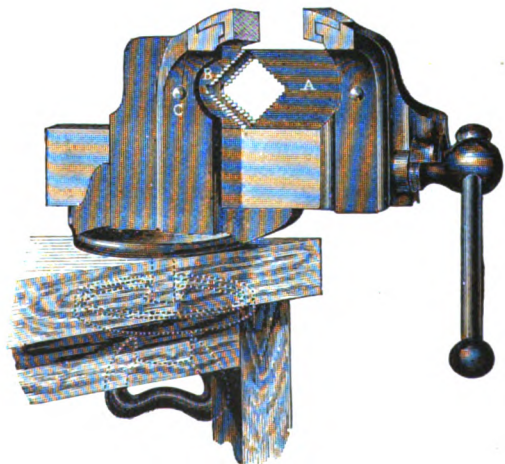
Fig. 228.



For Threading Brass Pipe of all sizes, from $\frac{1}{4}$ to $\frac{3}{8}$ inch.

PATENT COMBINATION VISE.

Fig. 231.



No. 1, holds pipe from 1 to 2 inch.
 " 2, " " " $\frac{1}{2}$ " 3 "

STEAM AND GAS FITTERS' TOOLS.

STANWOOD'S PATENT PIPE CUTTER.

Fig. 232.



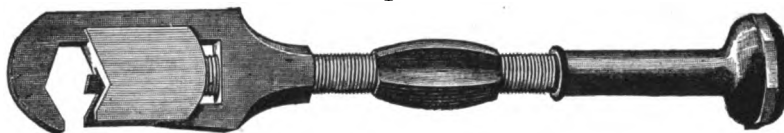
No. 1, Cuts $\frac{1}{4}$ to $\frac{1}{2}$ inch.

No. 2, Cuts 1 to 2 inches.

No. 3, Cuts $2\frac{1}{2}$ to 3 inches.

ROBES & CHAPMAN'S PATENT LATHE PIPE CUTTER.

Fig. 233.



No. 1, Cuts $\frac{1}{4}$ to $1\frac{1}{2}$ inches.

No. 2, Cuts 1 to 2 inches.

No. 3, Cuts 2 to $3\frac{1}{2}$ inches.

Fig. 234.



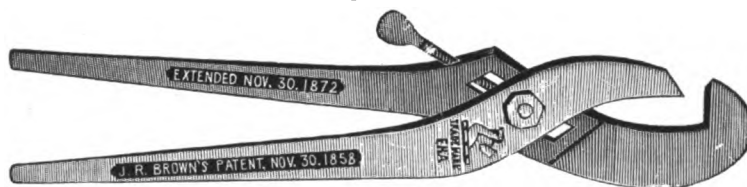
BURNER PLIERS.

Fig. 235.



BROWN'S PATENT ADJUSTABLE PIPE TONGS.

Fig. 235 $\frac{1}{2}$.



No. -	-	-	1.	2.	3.	4.	5.	6.	7.
Size of pipe, -	-	-	$\frac{1}{4}$ to $\frac{1}{2}$,	$\frac{3}{8}$ to $1\frac{1}{4}$,	1 to 2,	$1\frac{1}{2}$ to 3,	$2\frac{1}{2}$ to 4,	3 to 5,	4 to 7 inches.

PIPE TONGS.

Fig. 236.



Size,	$\frac{1}{4}$,	$\frac{3}{8}$,	$\frac{1}{2}$,	$\frac{3}{4}$,	1,	$1\frac{1}{2}$.
	$1\frac{1}{2}$,	2,	$2\frac{1}{2}$,	3,	$3\frac{1}{2}$,	4, inches.

ROBBINS' PATENT PIPE WRENCH.

Fig. 237.



No. - - -	2.	3.	4.	5.	6.
Size of pipe,	1 to 2,	$1\frac{1}{2}$ to 4,	2 to 6,	$2\frac{1}{2}$ to 8,	4 to 10 inches.

GAS FITTERS' AUGER.

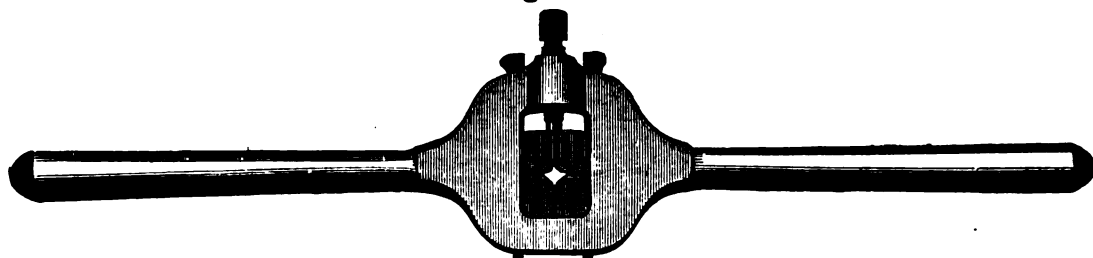
Fig. 238.



Size of Auger,	$\frac{3}{8}$,	$\frac{1}{2}$,	$\frac{3}{4}$,	$1\frac{1}{2}$,	$1\frac{3}{4}$,	$1\frac{1}{2}$,	2,	$2\frac{1}{2}$ inches.
Size of pipe,	$\frac{1}{4}$,	$\frac{3}{8}$,	$\frac{1}{2}$,	$\frac{3}{4}$,	1,	$1\frac{1}{2}$,	$1\frac{3}{4}$,	2 "

STEAM AND GAS FITTERS' TOOLS.

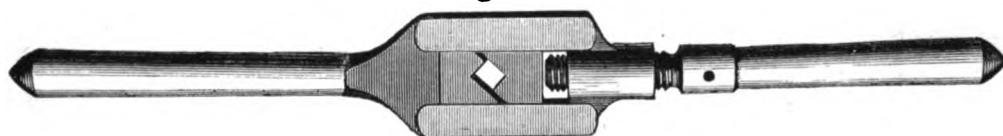
Fig. 239.



SCREW PLATES AND DIES.

Size A, 1 Screw Plate, 8 set Dies, $\frac{1}{8}$ to $\frac{1}{2}$ inch inclusive. | Size C, 1 Screw Plate, 4 set Dies, $\frac{1}{4}$ to $\frac{3}{4}$ inch, inclusive.
 " B, 1 " " 4 " $\frac{3}{8}$ to $\frac{1}{2}$ " " | " D, 1 " " 4 " $\frac{1}{2}$ to $1\frac{1}{2}$ " "
 The above List includes Plates and Dies only.

Fig. 240.



PATENT ADJUSTABLE TAP WRENCHES.

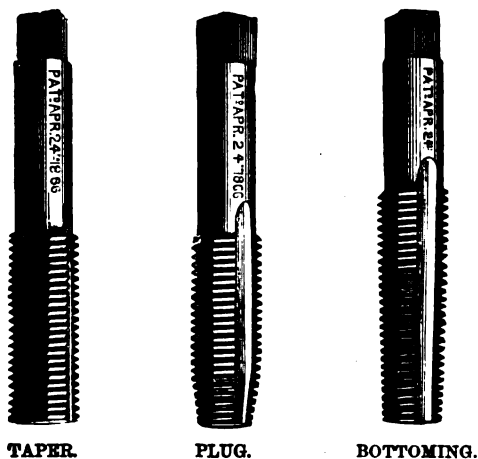
Size A, Fitting Taps from $\frac{1}{8}$ to $\frac{1}{2}$ inch diameter, inclusive.
 " B, " " $\frac{1}{4}$ to 1 " "
 " C, " " $\frac{3}{8}$ to $1\frac{1}{2}$ " "

Diameter.	No. Threads to inch.
1-4	16, 18 & 20
5-16	16 & 18
3-8	14, 16 & 18
7-16	14 & 16
1-2	12, 13 & 14
9-16	12 & 14
5-8	10, 11 & 12
11-16	11 & 12
3-4	10 & 12
13-16	10
7-8	9 & 10
15-16	9
1	8
1 1-8	7 & 8
1 1-4	7
1 3-8	6
1 1-2	6
1 5-8	5
1 3-4	5
1 7-8	4 $\frac{1}{2}$
2	4 $\frac{1}{2}$

VOLUTE TAPS.

MACHINISTS' HAND TAPS.

Fig. 241.



TAPER.

PLUG.

BOTTOMING.

3 Taps to set—Taper, Plug and Bottoming.

WE MAKE THE ABOVE A THIRTY-SECOND OVER SIZE FOR ROUGH IRON.

STEAM AND GAS FITTERS' TOOLS.

RATCHETS.

Fig. 242.

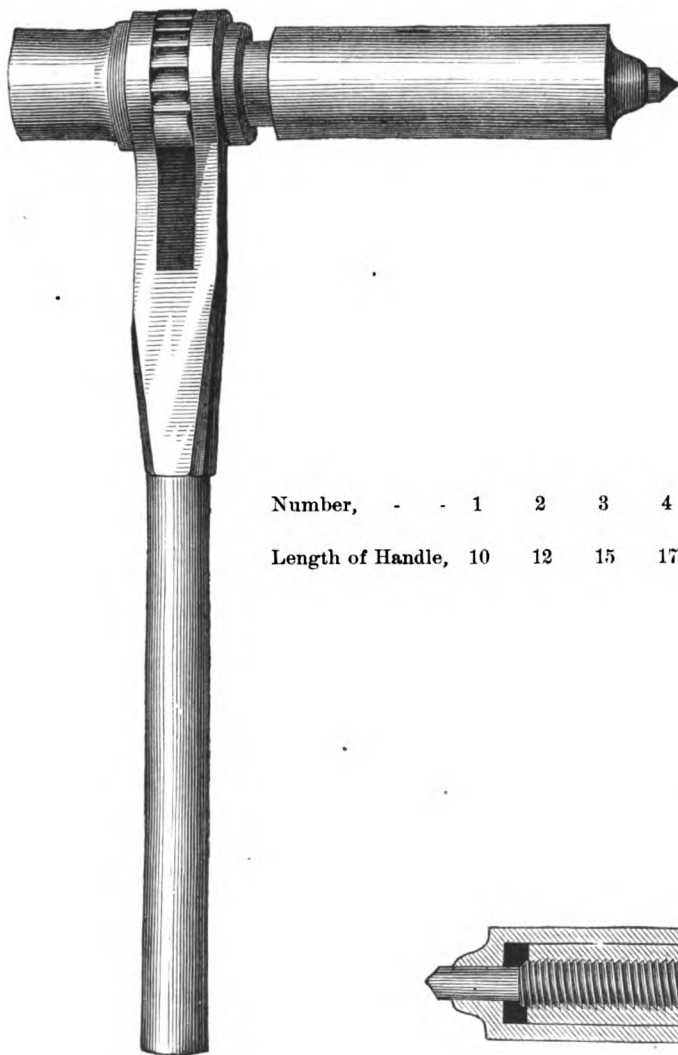
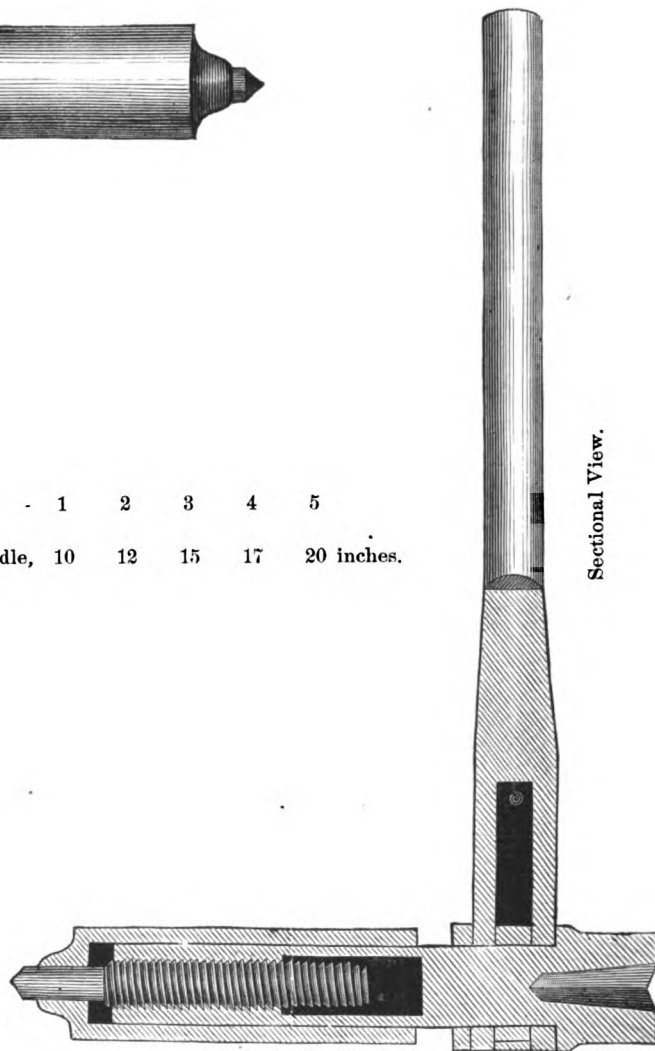


Fig. 243.

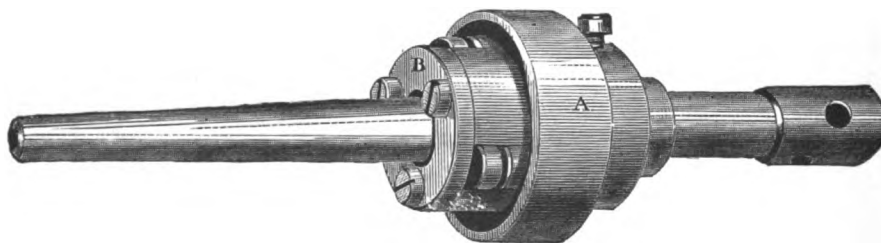


Sectional View.

Number,	-	-	1	2	3	4	5
Length of Handle,	10	12	15	17	20	inches.	

DUDGEON'S TUBE EXPANDERS.

Fig. 244.



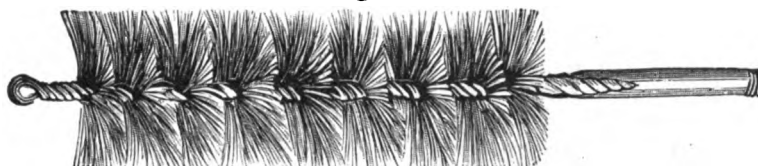
All sizes.

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FLUE BRUSHES.

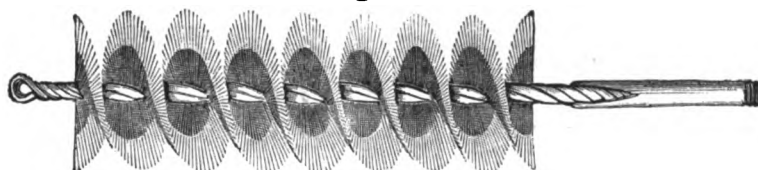
WHALEBONE.

Fig. 245.



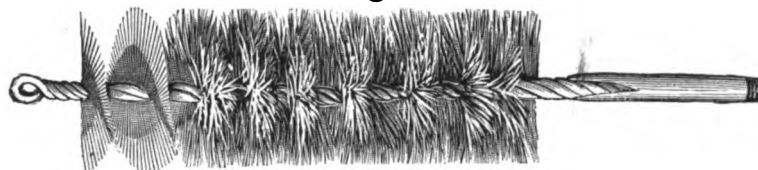
PATENT STEEL WIRE.

Fig. 246.



PATENT COMBINATION BONE AND STEEL WIRE.

Fig. 247.

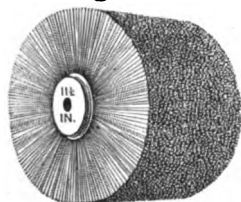


Sizes, 1, 1½, 1¾, 2, 2½, 2¾, 3, 3½, 3¾, 4, 5, 6, 7 inches.

COMMON WHALEBONE

FLUE BRUSH.

Fig. 248.



CHRISTOFFEL'S PATENT ELLIPTIC BOILER TUBE SCRAPERS.

Fig. 248t.



Fig. 249.



Fig. 249t.



Sizes, 2, 2½, 2¾, 3, 3½, 3¾, 4, 4½, 4¾, 5, 5½, 5¾, 6 inches.

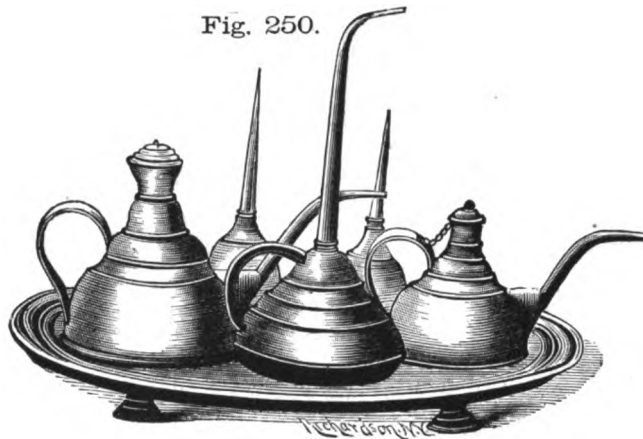
SCOTCH GAUGE GLASSES FOR WATER GAUGES.

Sizes, 1x10	1x11	1x12	1x13	1x14	1x15	1x16	1x10
1x11	1x12	1x13	1x14	1x15	1x16	1x17	1x18
1x13	1x14	1x15	1x16	1x17	1x18	1x19	1x20
1x22	1x24	1x24	1x30	1x36	1x24	1x30	1x36

OIL CANS.

Fig. 250.

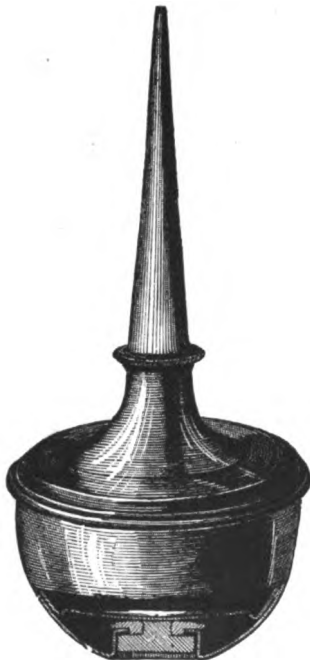
No. 1.
5 pieces, with Tray.



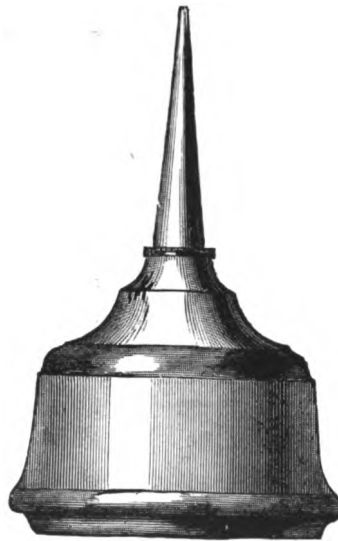
No. 2.
8 pieces, with Tray.

EXTRA BOTTOM RAILROAD OILER.
Fig. 252.

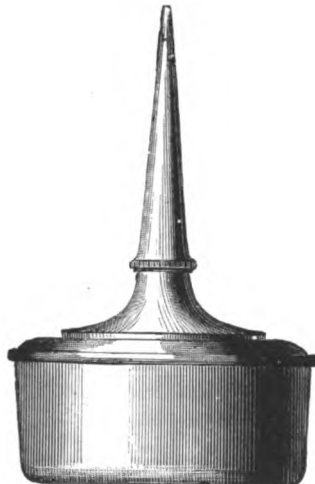
DOUBLE BOTTOM OIL CAN.
Fig. 251.



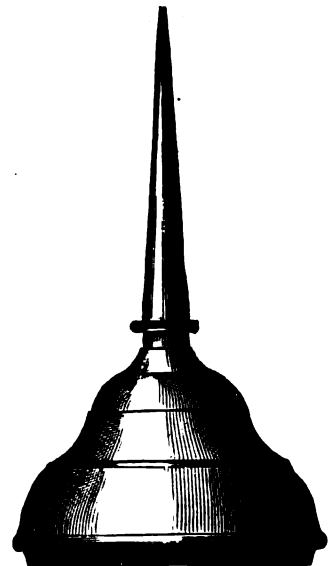
Cannot be upset.



SEAMLESS BOTTOM OILER.
Fig. 254.



EXTRA BOTTOM OILER.
IMPROVED.
Fig. 253.



A. CARR, MANUFACTURER, NEW YORK.

GAS FITTERS' PROVING PUMPS.

Fig. 255.

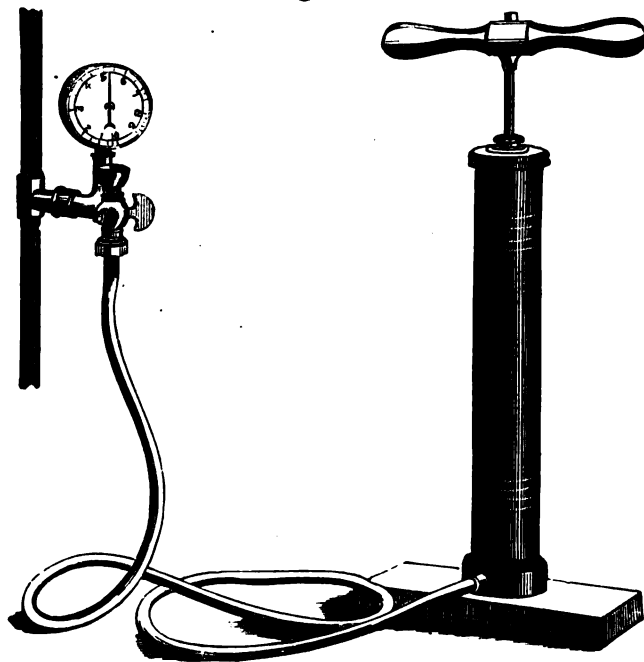
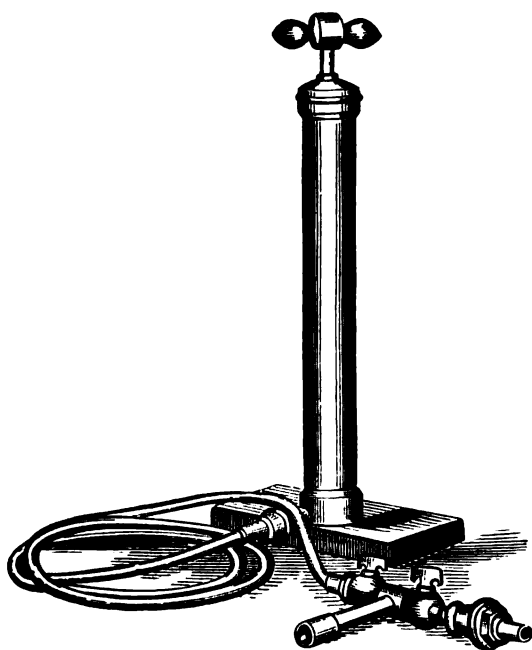


Fig. 256.



TORCH.

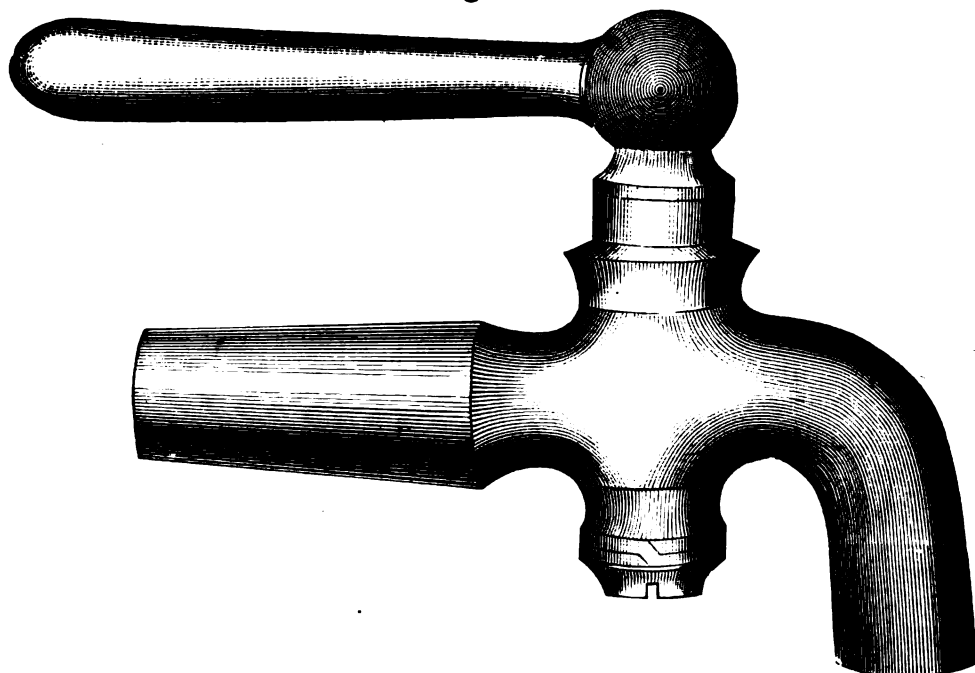
Fig. 257.



PLUMBERS' BRASS WORK.

PLAIN BIBB.

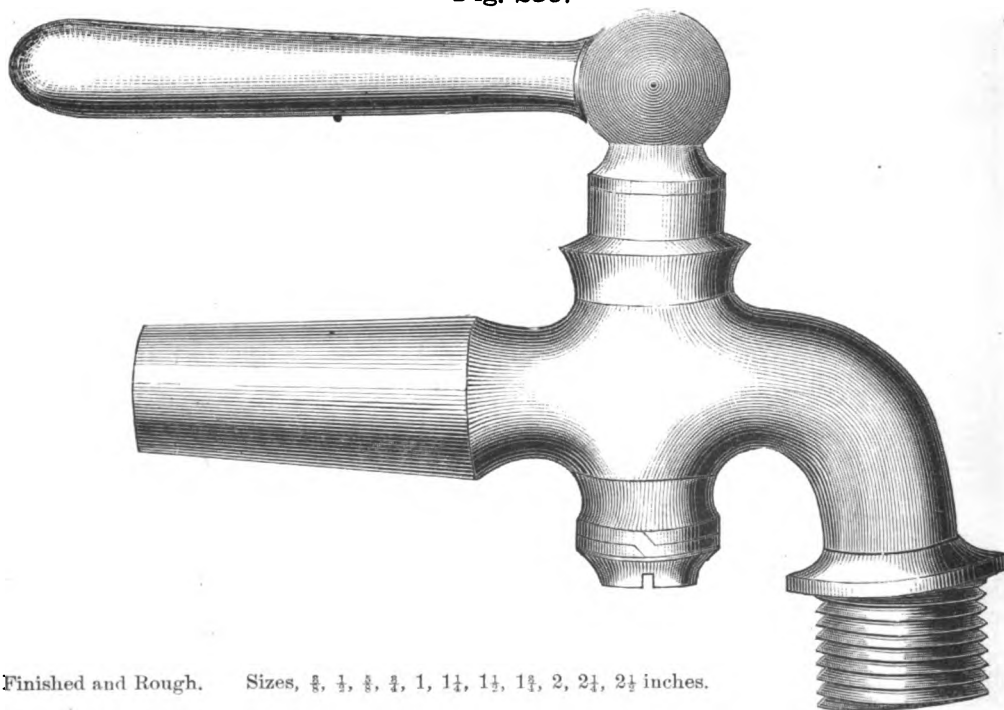
Fig. 258.



Finished, Rough and Plated. Sizes, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$, 2, $2\frac{1}{4}$, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4 inches.

HOSE BIBB.

Fig. 259.



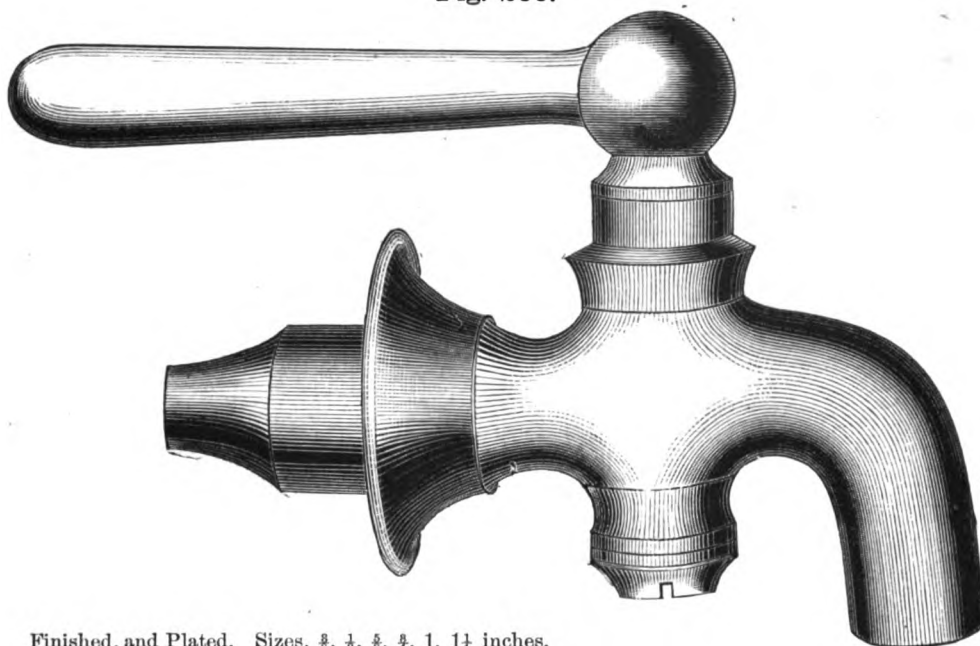
Finished and Rough. Sizes, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$, 2, $2\frac{1}{4}$, $2\frac{1}{2}$ inches.

A. CARR, MANUFACTURER, NEW YORK.

PLUMBERS' BRASS WORK.

PLAIN BIBB FLANGE AND THIMBLE.

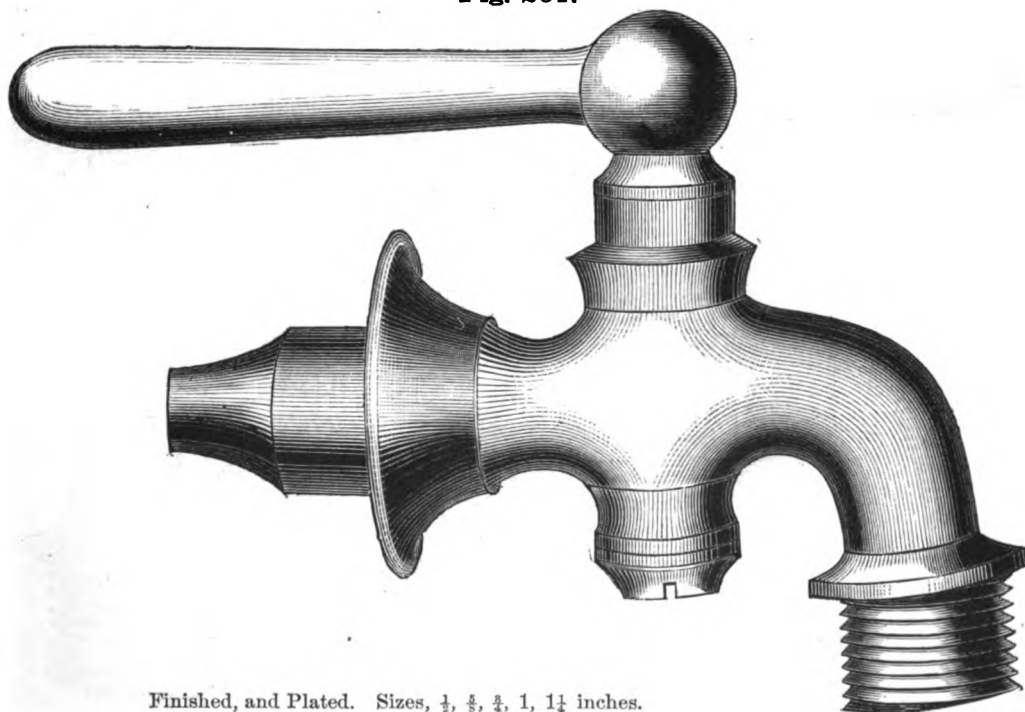
Fig. 260.



Finished, and Plated. Sizes, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$ inches.

HOSE BIBB, FLANGE AND THIMBLE.

Fig. 261.



Finished, and Plated. Sizes, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$ inches.

PLAIN BIBB, SCREW SHANK AND SHOULDER, FOR IRON PIPE.

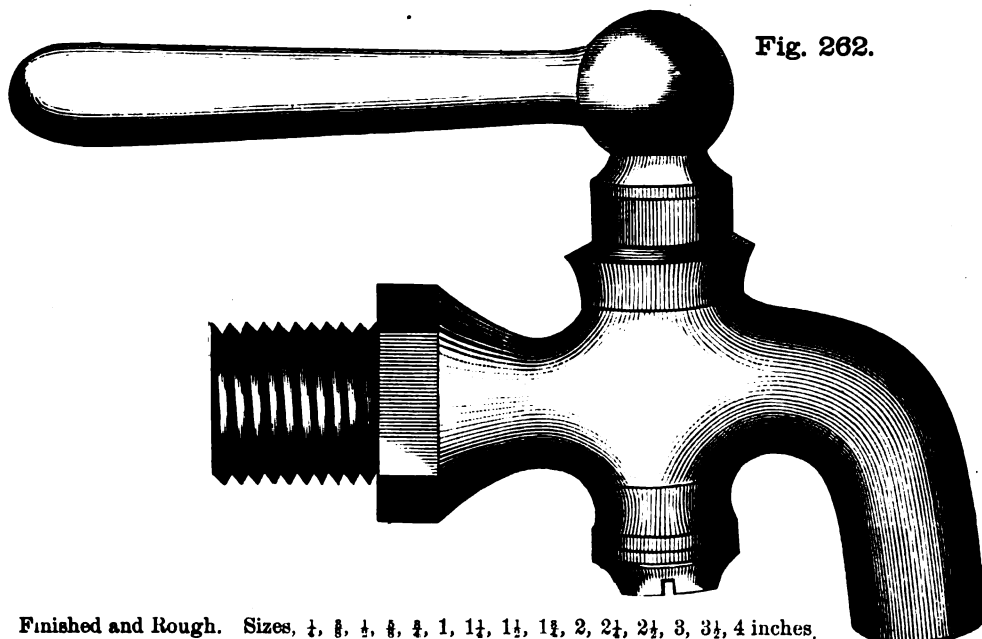


Fig. 262.

Finished and Rough. Sizes, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$, 2, $2\frac{1}{4}$, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4 inches.

HOSE BIBB, SCREW SHANK AND SHOULDER, FOR IRON PIPE.

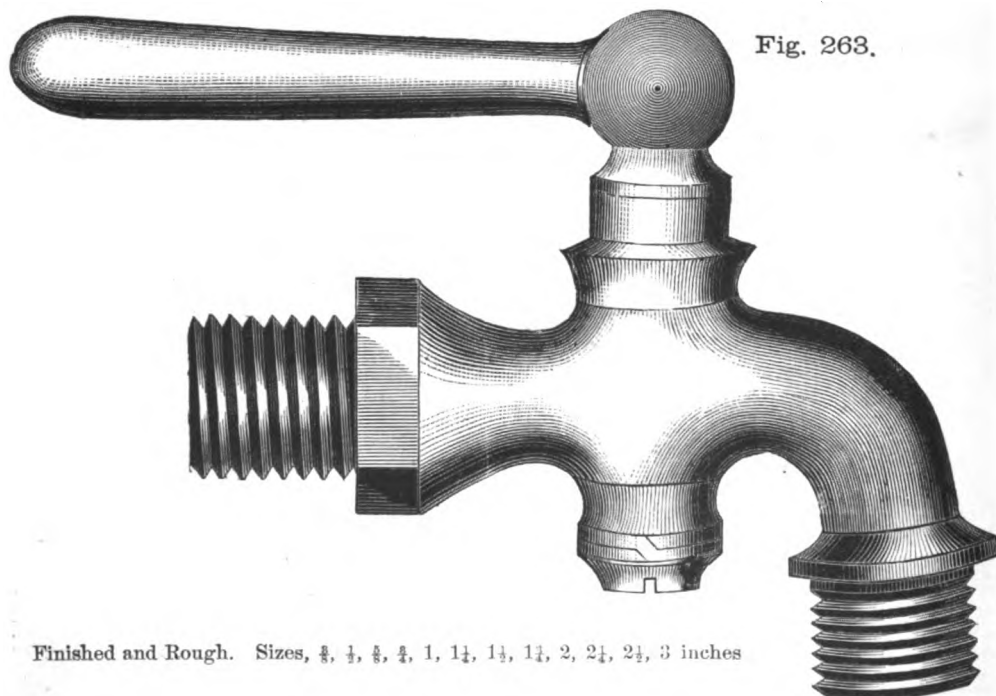
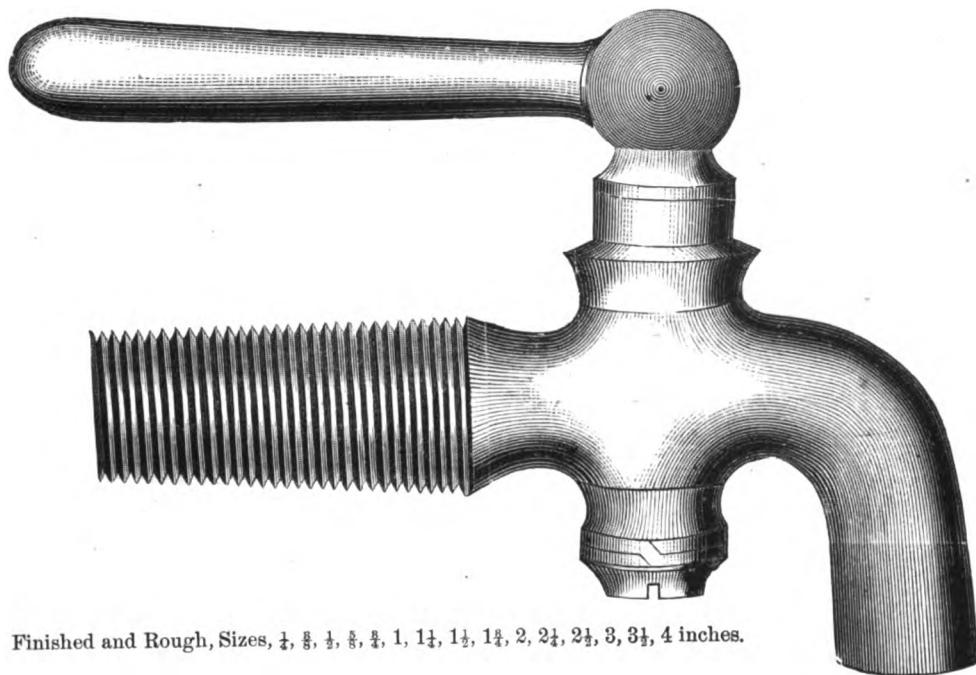


Fig. 263.

Finished and Rough. Sizes, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$, 2, $2\frac{1}{4}$, $2\frac{1}{2}$, 3 inches

PLAIN BIBB, SCREW TAIL.

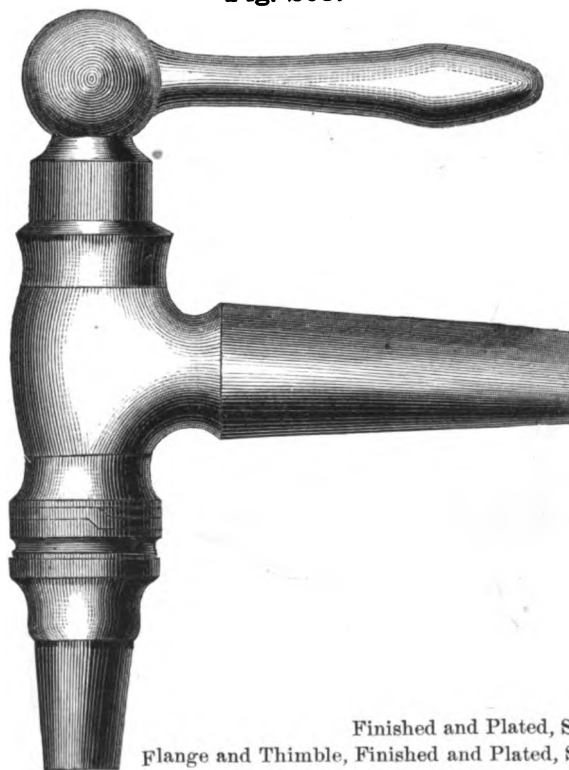
Fig. 264.



Finished and Rough, Sizes, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$, 2, $2\frac{1}{4}$, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4 inches.

BATH BIBB.

Fig. 265.

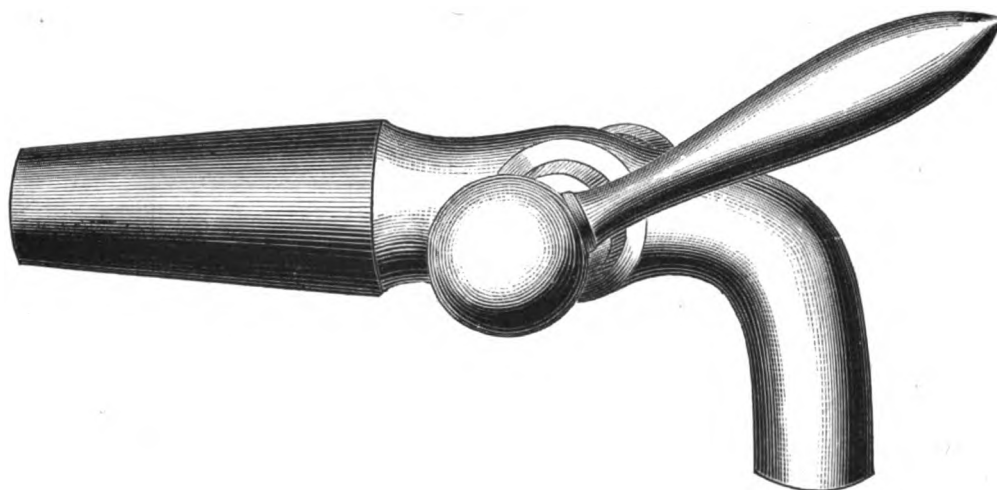


Finished and Plated, Sizes, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$ inch.

Flange and Thimble, Finished and Plated, Sizes, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$ inch.

WASH TRAY BIBBS.

Fig. 266.

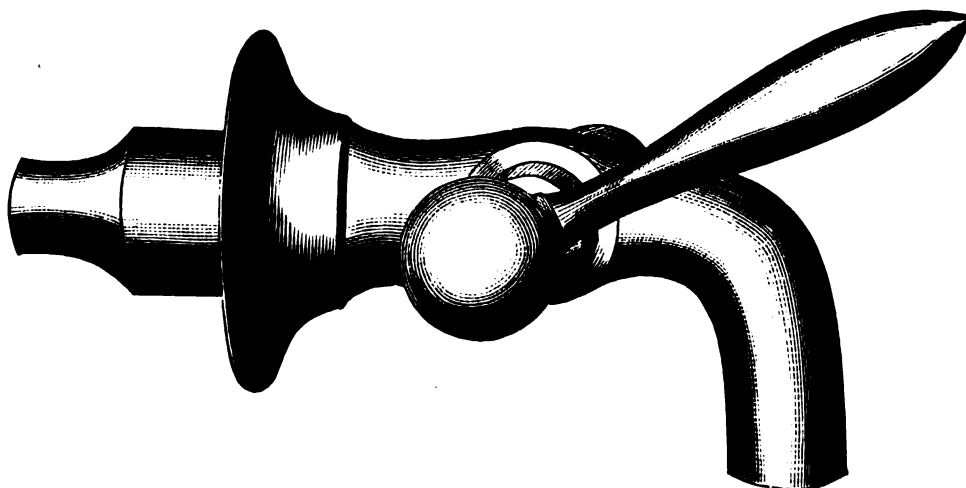


Finished, Sizes - - $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{2}$, 1 inch.

Screwed for Iron Pipe, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{2}$, 1 "

FLANGE AND THIMBLE.

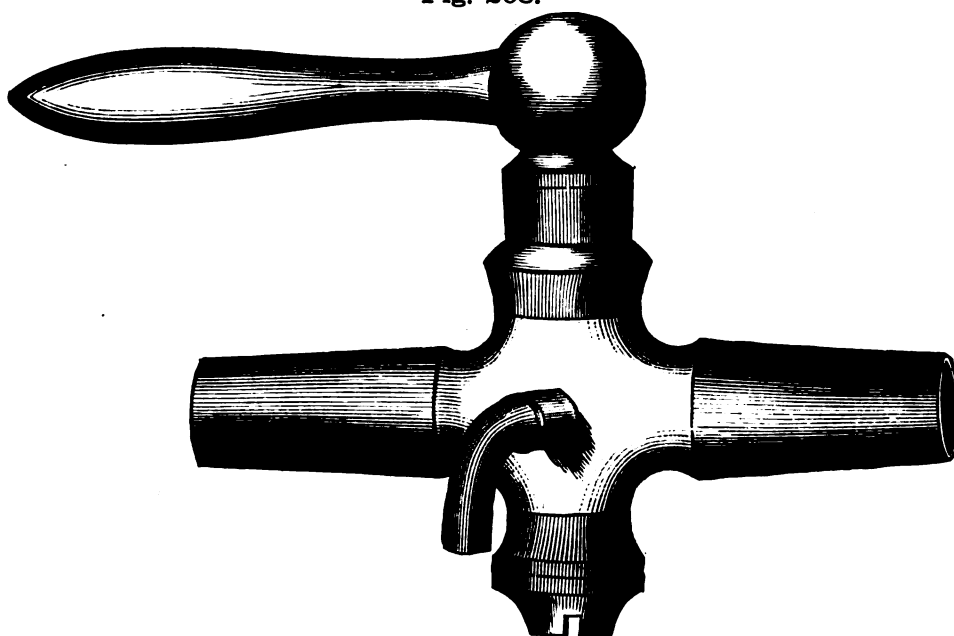
Fig. 267.



Finished, Sizes, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{2}$, 1 inch.

STOP AND WASTE, OR SHOWER COCK.

Fig. 268.

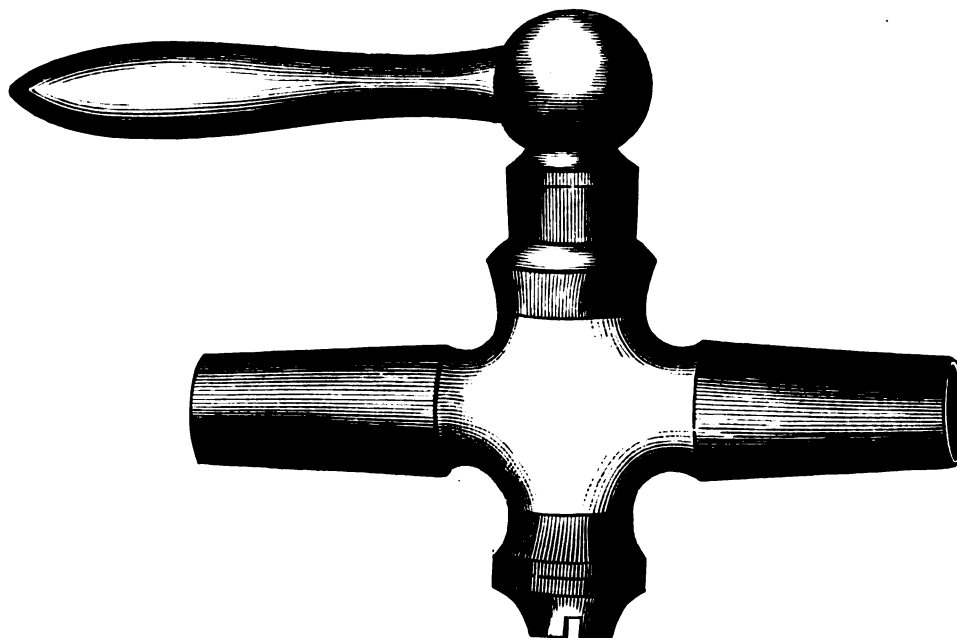


Finished and Plated.

Sizes, $\frac{1}{2}$, $\frac{3}{4}$, 1 , $1\frac{1}{2}$ inch.

PLAIN STOPS.

Fig. 269.



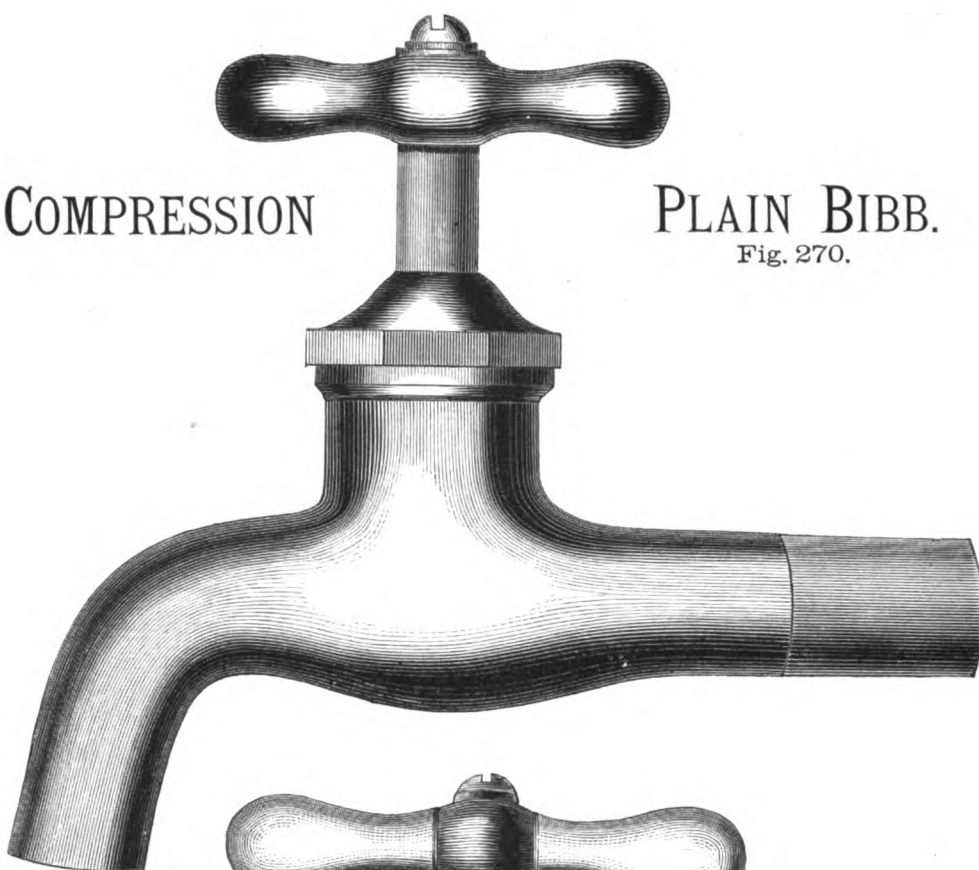
Finished and Plated.

Sizes, $\frac{1}{2}$, $\frac{3}{4}$, 1 , $1\frac{1}{2}$, 2 , $2\frac{1}{2}$, 3 inches.

COMPRESSION

PLAIN BIBB.

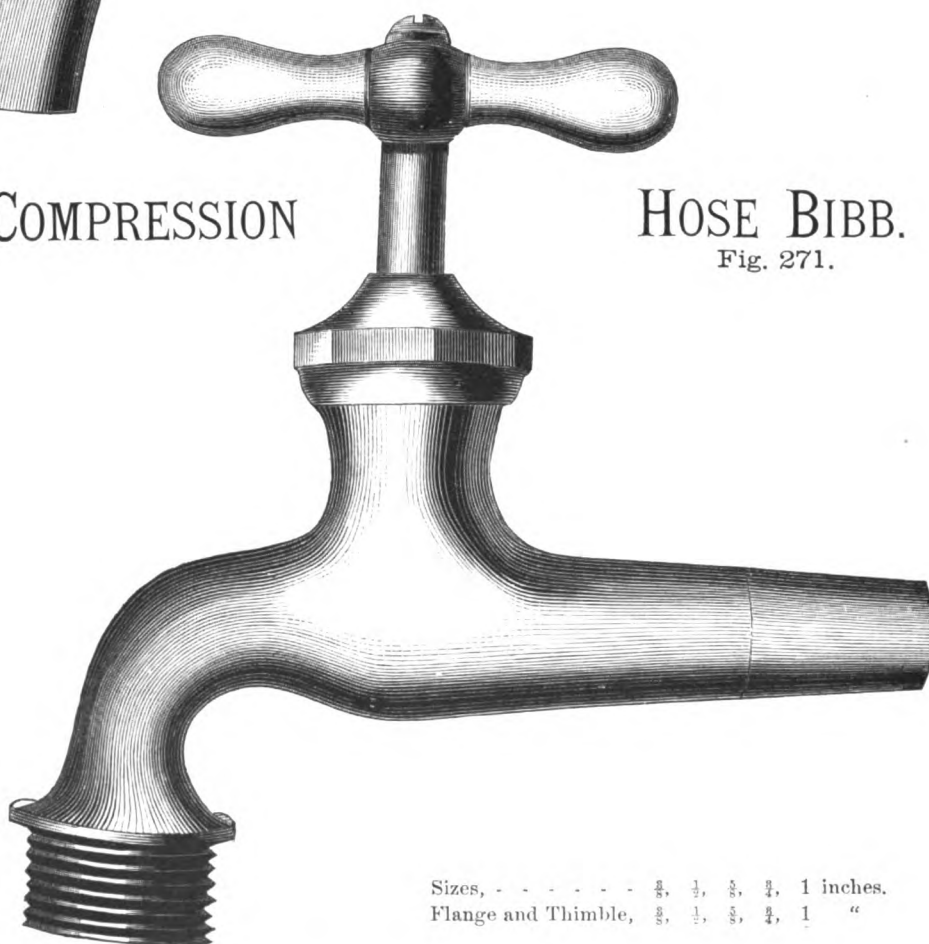
Fig. 270.



COMPRESSION

HOSE BIBB.

Fig. 271.



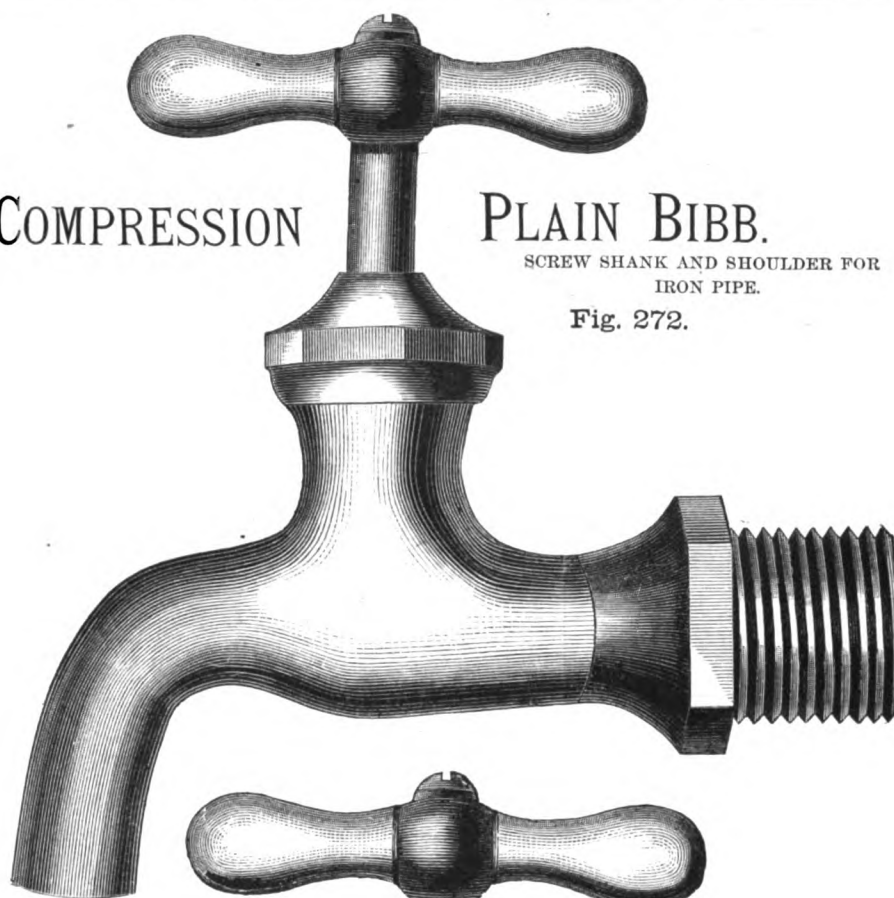
Sizes, - - - - - $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{2}$, 1 inches.
 Flange and Thimble, $\frac{1}{2}$, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{2}$, 1 "

COMPRESSION

PLAIN BIBB.

SCREW SHANK AND SHOULDER FOR
IRON PIPE.

Fig. 272.

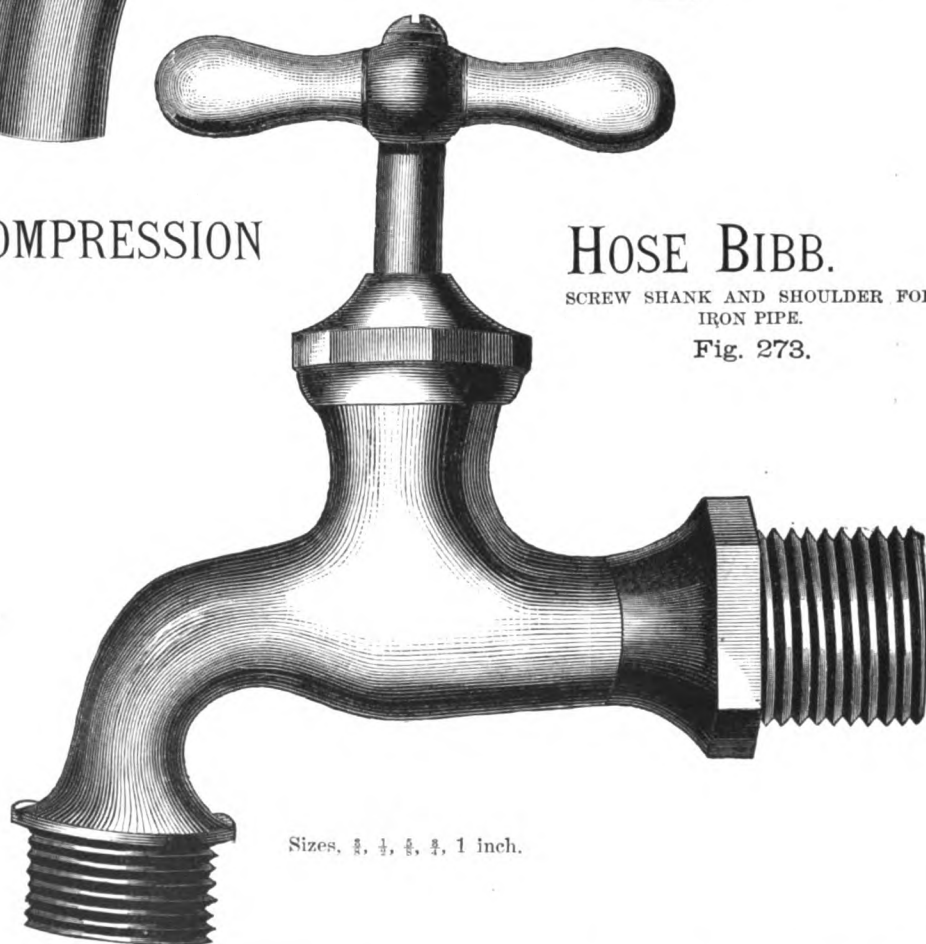


COMPRESSION

HOSE BIBB.

SCREW SHANK AND SHOULDER FOR
IRON PIPE.

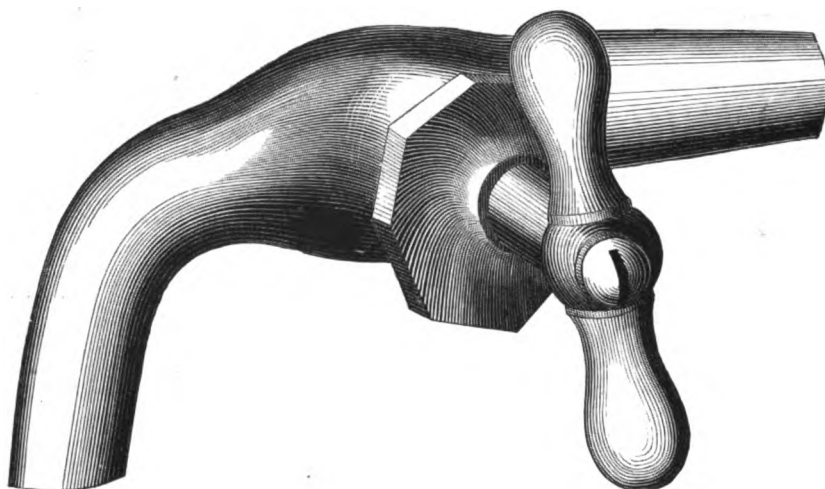
Fig. 273.



Sizes, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{2}$, 1 inch.

COMPRESSION WASH TRAY BIBB.

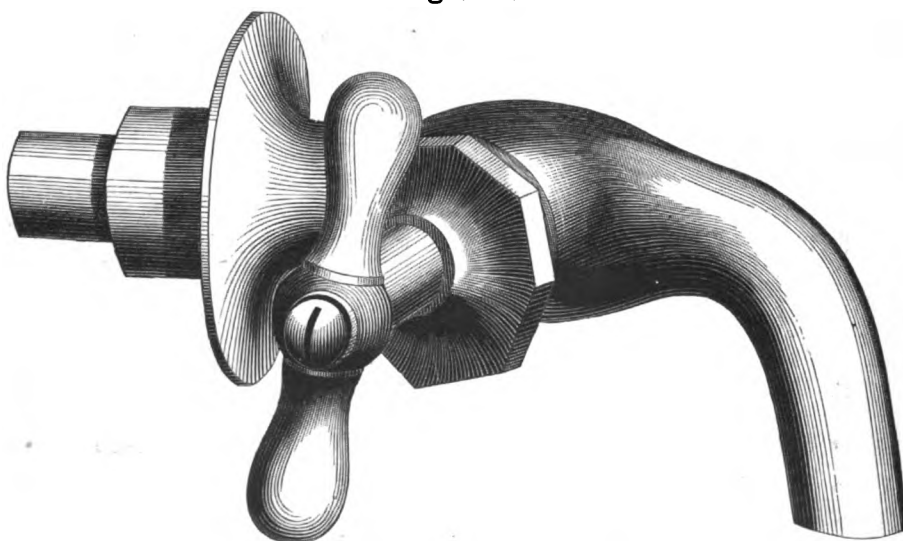
Fig. 274.



Sizes, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, 1 inch. Screw Shank and Shoulder for Iron Pipe, same sizes.

WASH TRAY COCK, FLANGE AND THIMBLE.

Fig. 275.



Sizes, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, 1 inch.

COCKS.

COMPRESSION WASH TRAY, NEW STYLE.

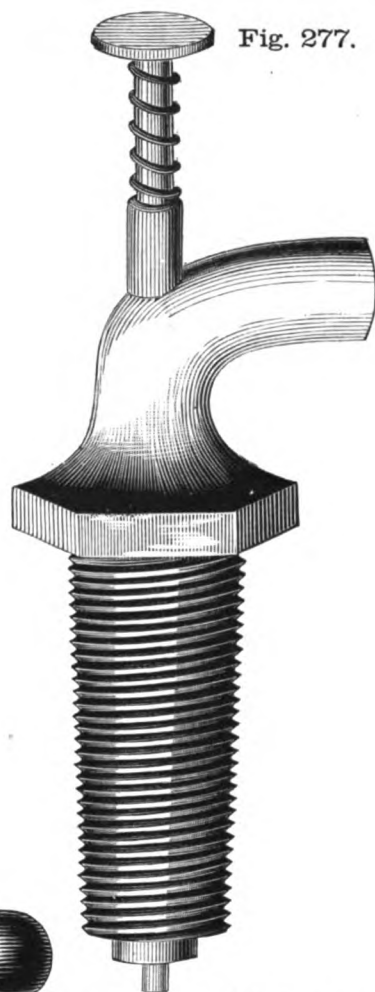
Fig. 276.



Sizes, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{2}$, 1 inch.

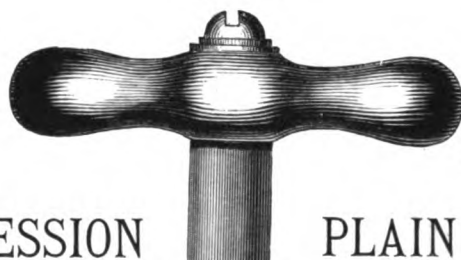
SELF-CLOSING CISTERN.

Fig. 277.



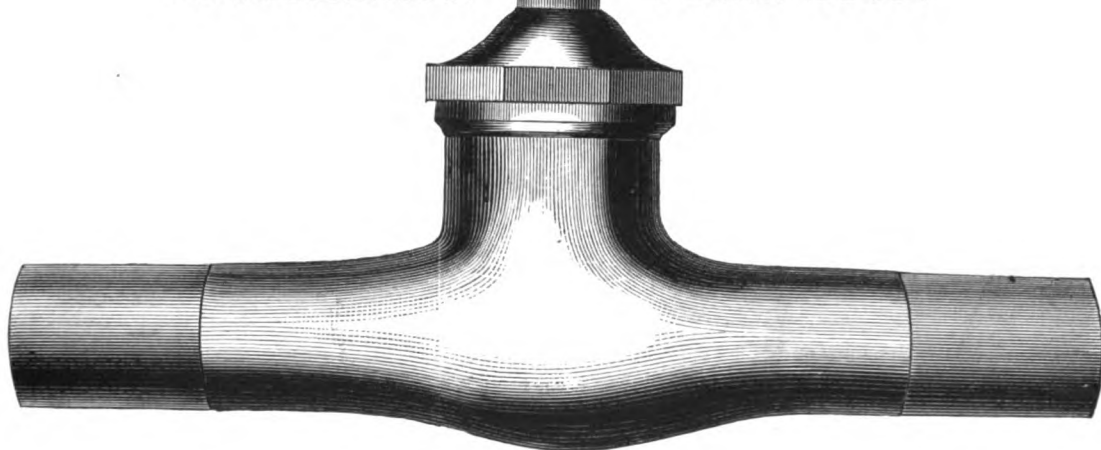
Rough, and Finished. Sizes, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{2}$, 1 inch.

Fig. 278.



COMPRESSION

PLAIN STOP.

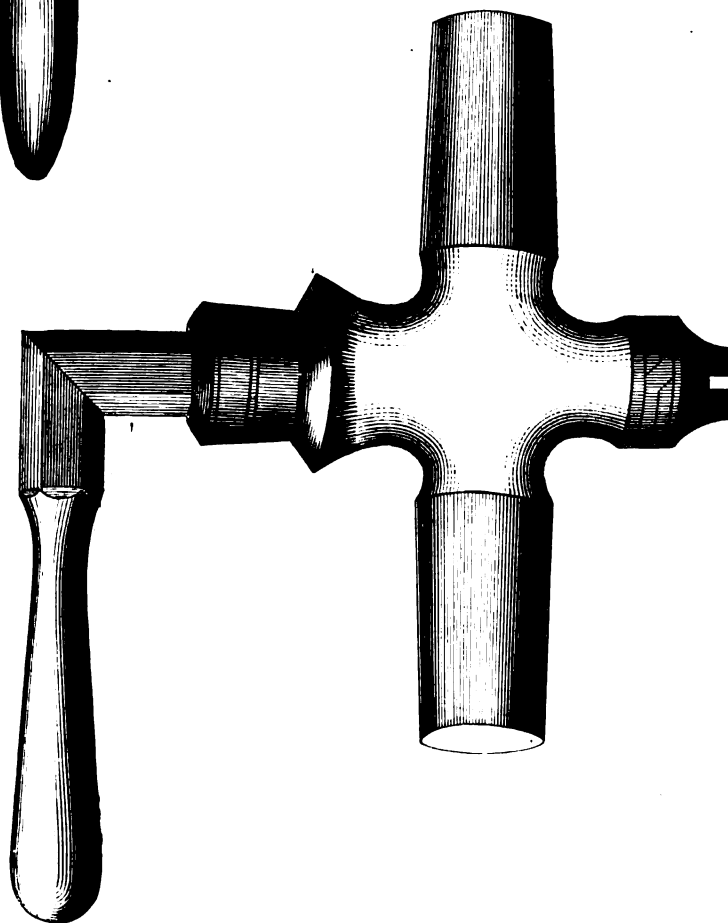


Rough, Finished, or Screwed for Iron Pipe. Sizes, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{2}$, 1 inch.

ROUGH STOP, LEVER HANDLE.

SPRING & SCREW, OR NUT & WASHER BOTTOM.

Fig. 280.

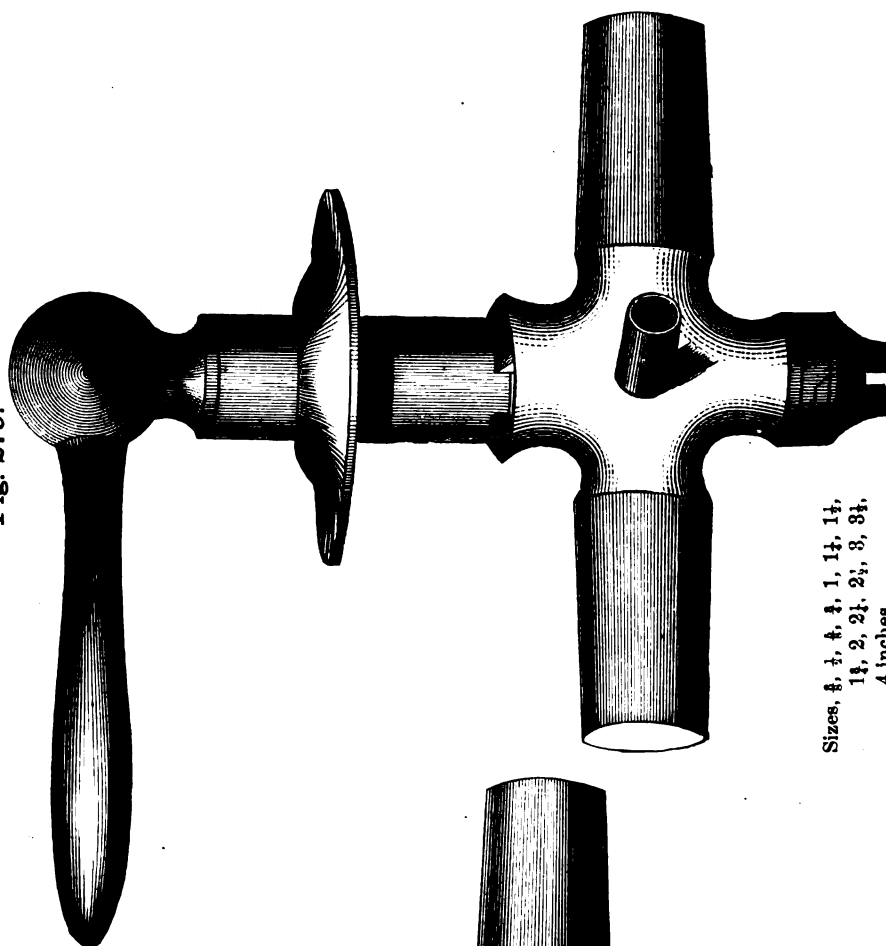


Sizes, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1 , $1\frac{1}{2}$, $1\frac{3}{4}$, 2 , $2\frac{1}{4}$, $2\frac{1}{2}$, 3 , $3\frac{1}{2}$, 4 inches.

SHOWER STOP AND WASTE,

BRASS PLATE AND LEVER.

Fig. 279.



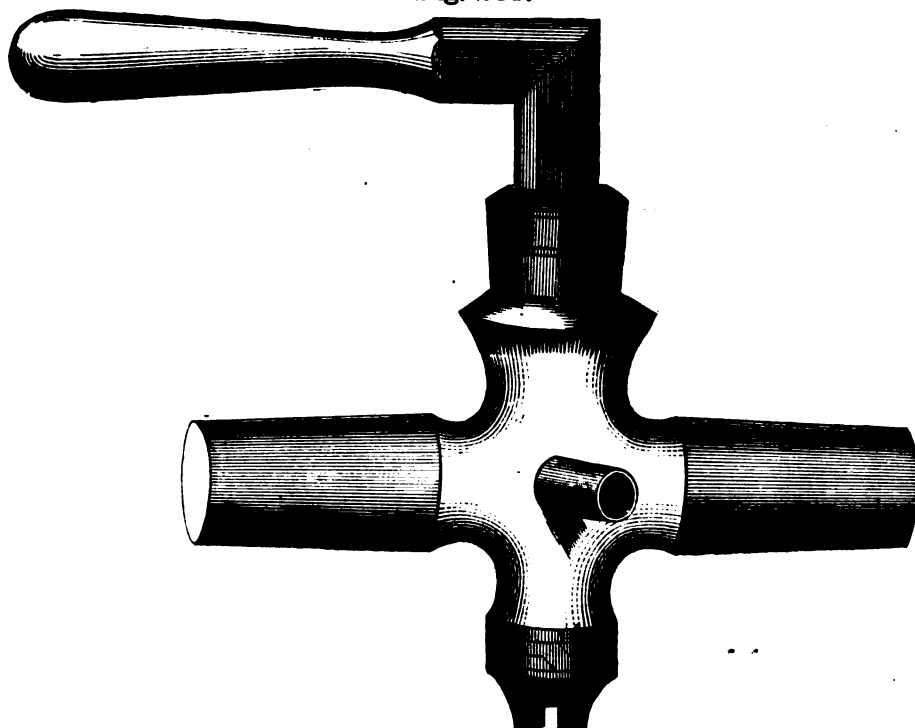
Sizes, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1 , $1\frac{1}{2}$, $1\frac{3}{4}$, 2 , $2\frac{1}{4}$, $2\frac{1}{2}$, 3 , $3\frac{1}{2}$, 4 inches.

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ROUGH STOP AND WASTE LEVER HANDLE.

SPRING AND SCREW OR NUT AND WASHER BOTTOM.

Fig. 281.

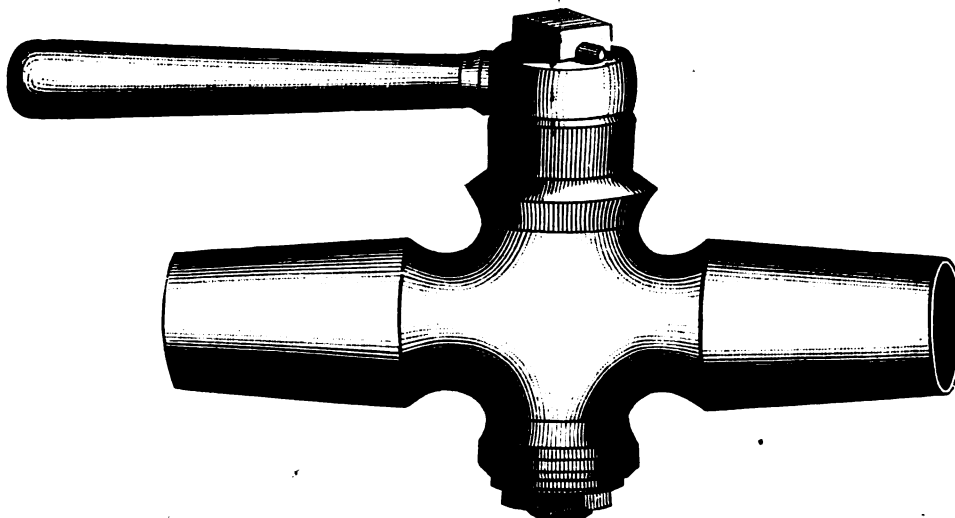


Sizes, $\frac{3}{4}$, 1, $\frac{3}{4}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{4}$, 2 inches.

ROUGH WATER STOP.

HEAVY SHANK, NUT, AND WASHER BOTTOM.

Fig. 282.

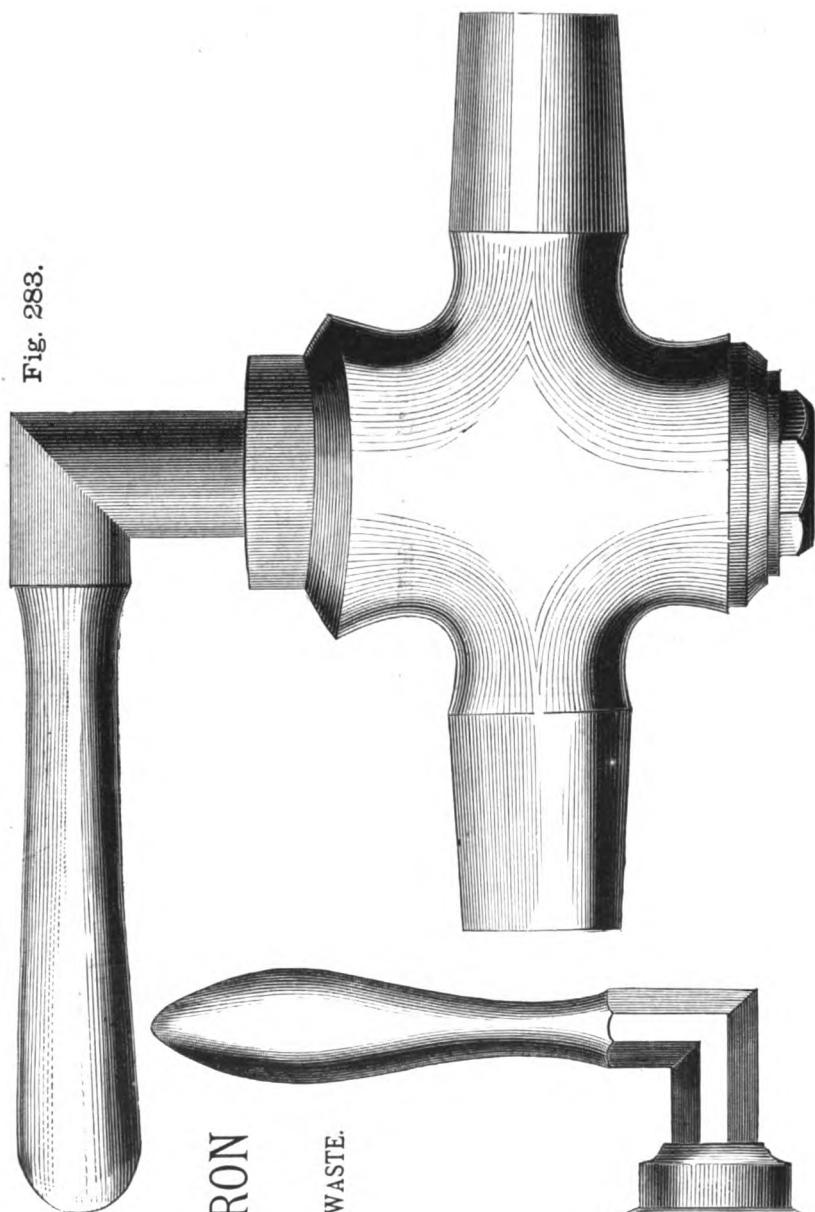


Sizes, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{4}$, $1\frac{1}{4}$, 2, $2\frac{1}{4}$, $2\frac{1}{4}$, 3, $3\frac{1}{4}$, 4 inches

ROUND WAY STOP, LEVER OR TEE HANDLE.

WITH OR WITHOUT WASTE, AND FOR LEAD OR IRON PIPE.

Fig. 283.

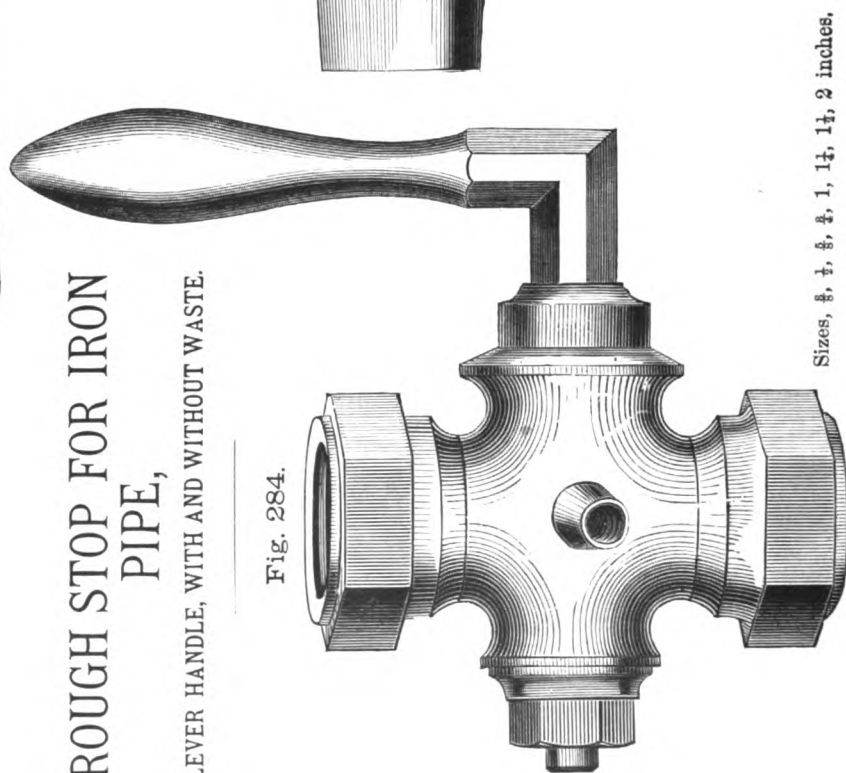


Sizes, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, 1 , $1\frac{1}{4}$, $1\frac{1}{2}$, 2 , $2\frac{1}{4}$, $2\frac{1}{2}$ inches.

ROUGH STOP FOR IRON PIPE,

LEVER HANDLE, WITH AND WITHOUT WASTE.

Fig. 284.

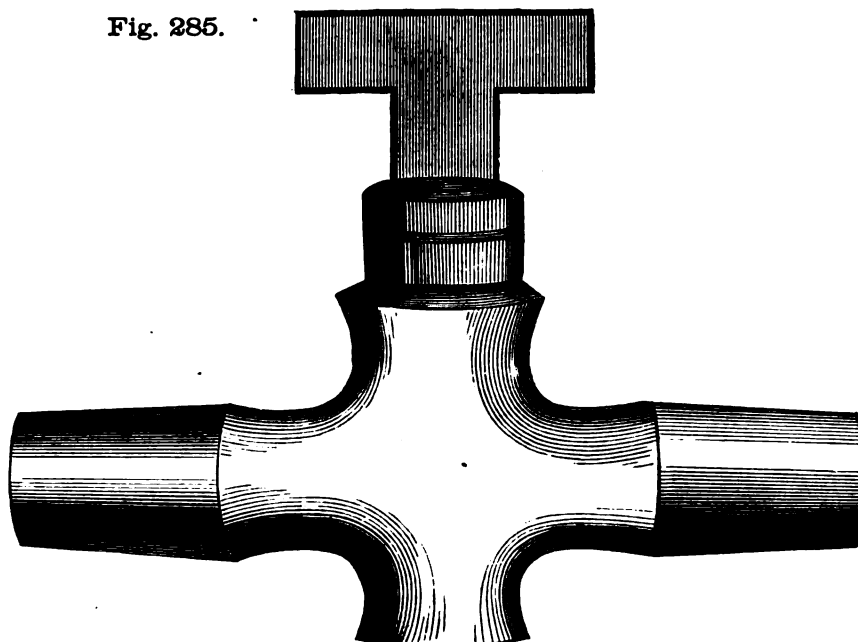


Sizes, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, 1 , $1\frac{1}{4}$, $1\frac{1}{2}$, 2 inches.

ROUGH STOP, TEE HANDLE, RIVET BOTTOM.

WITH OR WITHOUT WASTE,

Fig. 285.

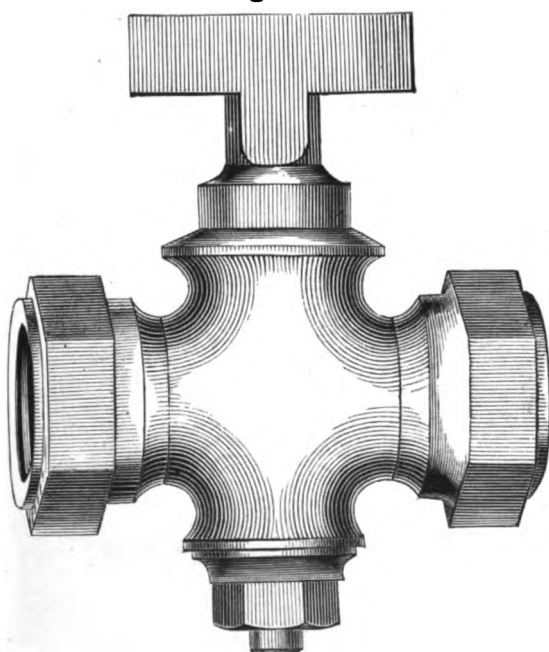


Sizes, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1 , $1\frac{1}{4}$, $1\frac{1}{2}$, 2 inches.

ROUGH STOP, TEE HANDLE, FOR IRON PIPE.

WITH OR WITHOUT WASTE AND STOP ON KEY.

Fig. 286.



Nut and Washer and Rivet Bottom. Sizes, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, 1 , $1\frac{1}{4}$, $1\frac{1}{2}$, 2 inches.

TEE HANDLE HOPPER COCK.

Fig. 287.



Sizes, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$ inch.

BALL COCK.

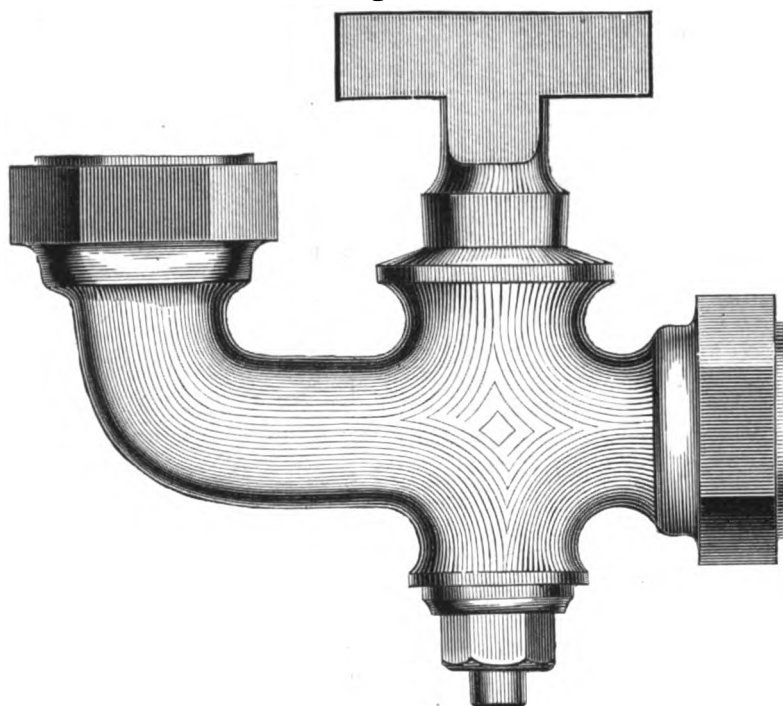
Fig. 288.



Sizes, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1 , $1\frac{1}{4}$ inch.

HYDRANT COCK FOR IRON PIPE.

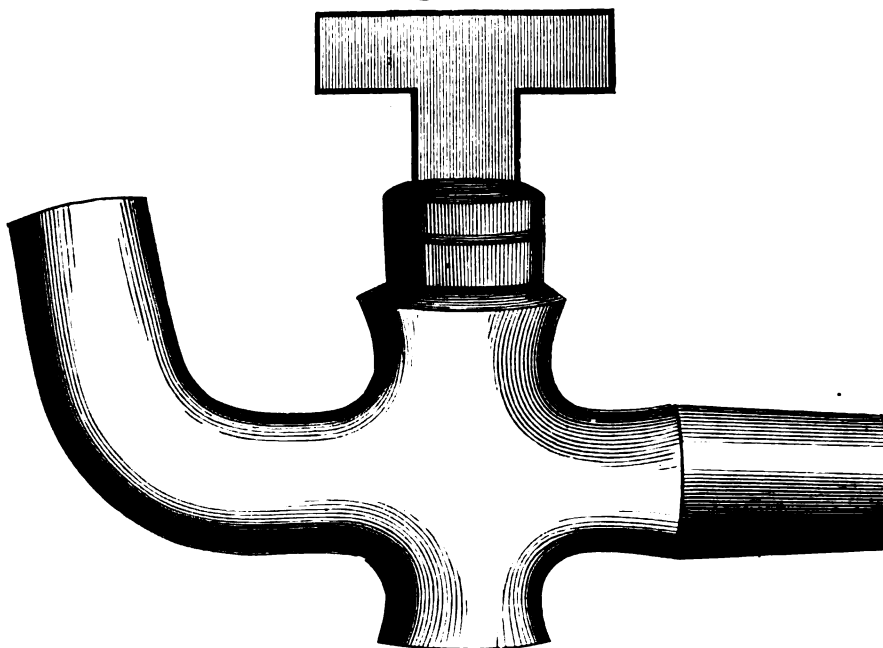
Fig. 289.



Rivet, or Nut and Washer Bottom. Sizes, $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, 1 inch.

HYDRANT COCK.

Fig. 290.

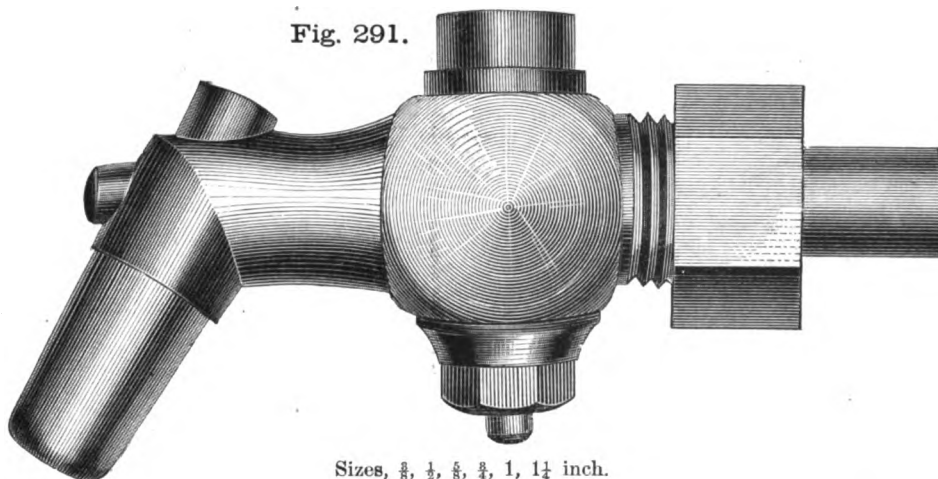


Rivet, or Nut and Washer Bottom. Sizes, $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, 1 inch.

CORPORATION COCKS.

FOR IRON PIPE.

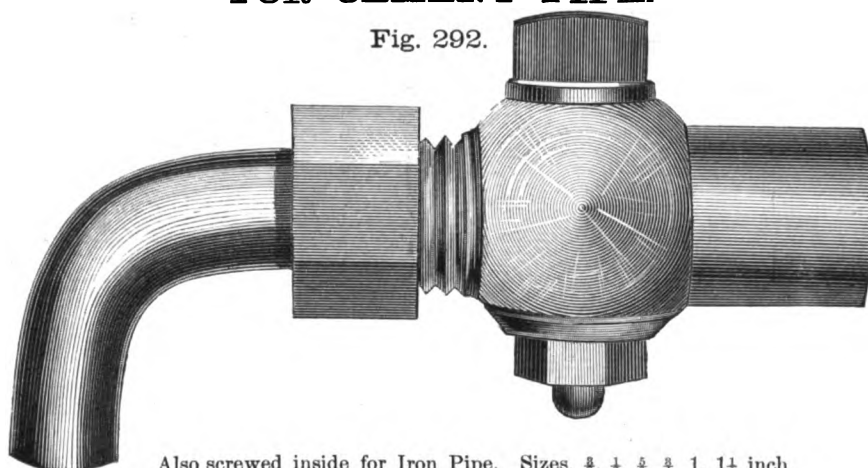
Fig. 291.



Sizes, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$ inch.

FOR CEMENT PIPE.

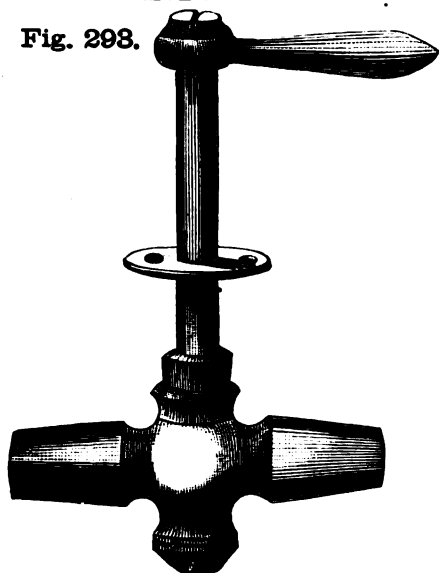
Fig. 292.



Also screwed inside for Iron Pipe. Sizes, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$ inch.

LONG STEM HOPPER COCK, PLATE AND
LEVER FINISHED.

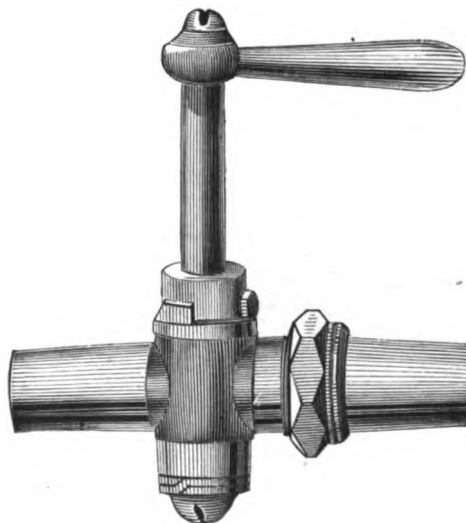
Fig. 293.



Sizes, $\frac{1}{2}$, $\frac{3}{4}$, 1 inch.

SHIP WATER CLOSET COCK.

Fig. 294.



Sizes, $\frac{3}{8}$, $\frac{1}{2}$, 1 inch.

BASIN PULLS.

Fig. 295.



Fig. 296.

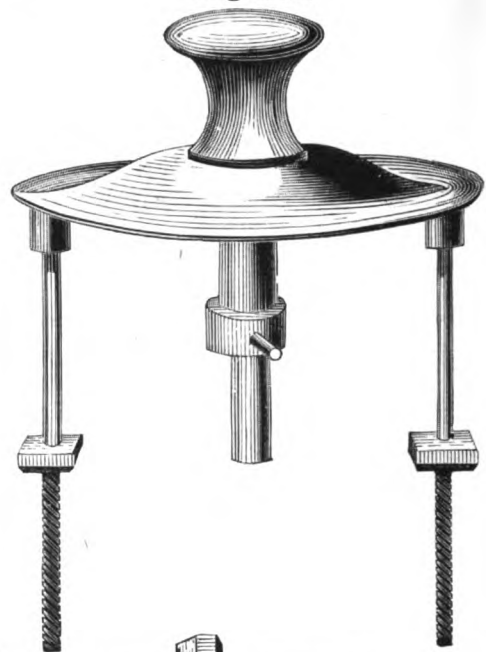
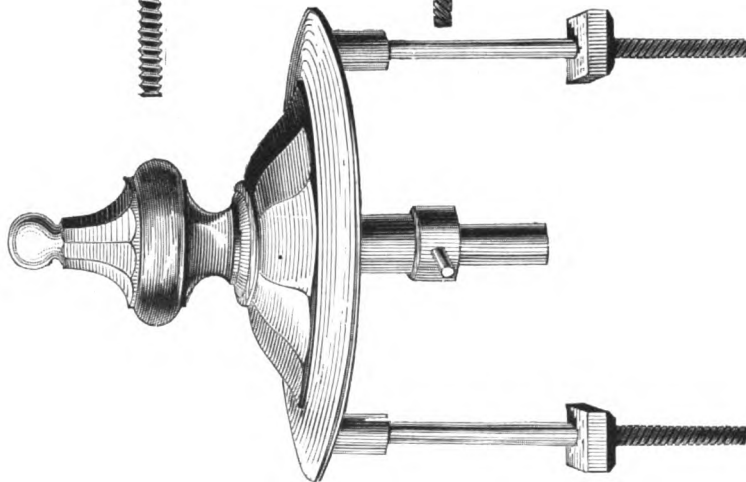
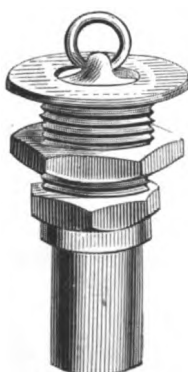


Fig. 297.



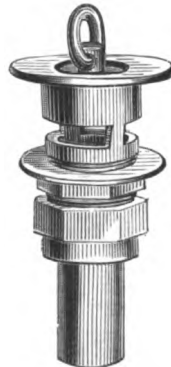
BASIN PLUG.

Fig. 298.



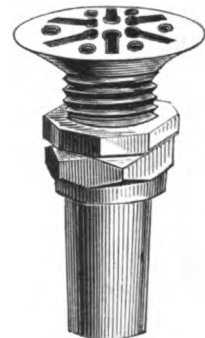
BASIN PLUG, PAT. OVERFLOW.

Fig. 299.



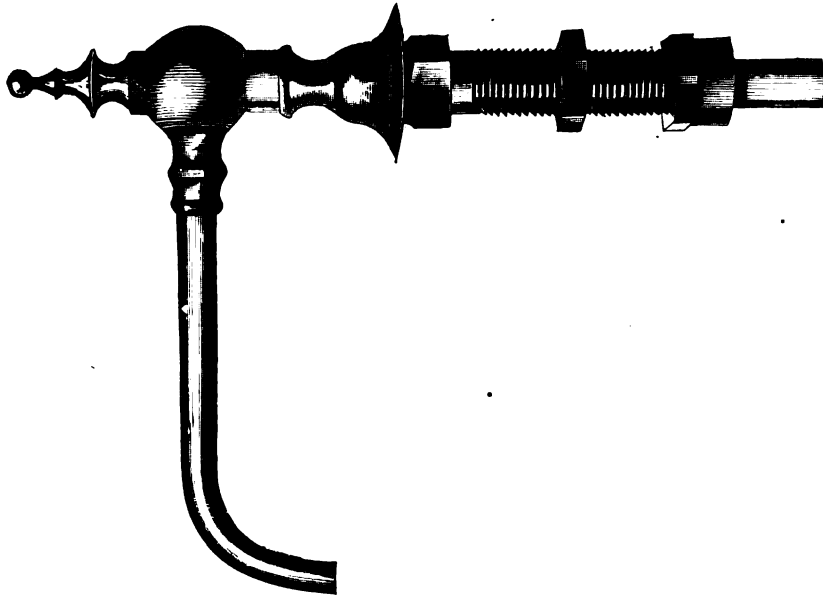
BASIN GRATE.

Fig. 300.

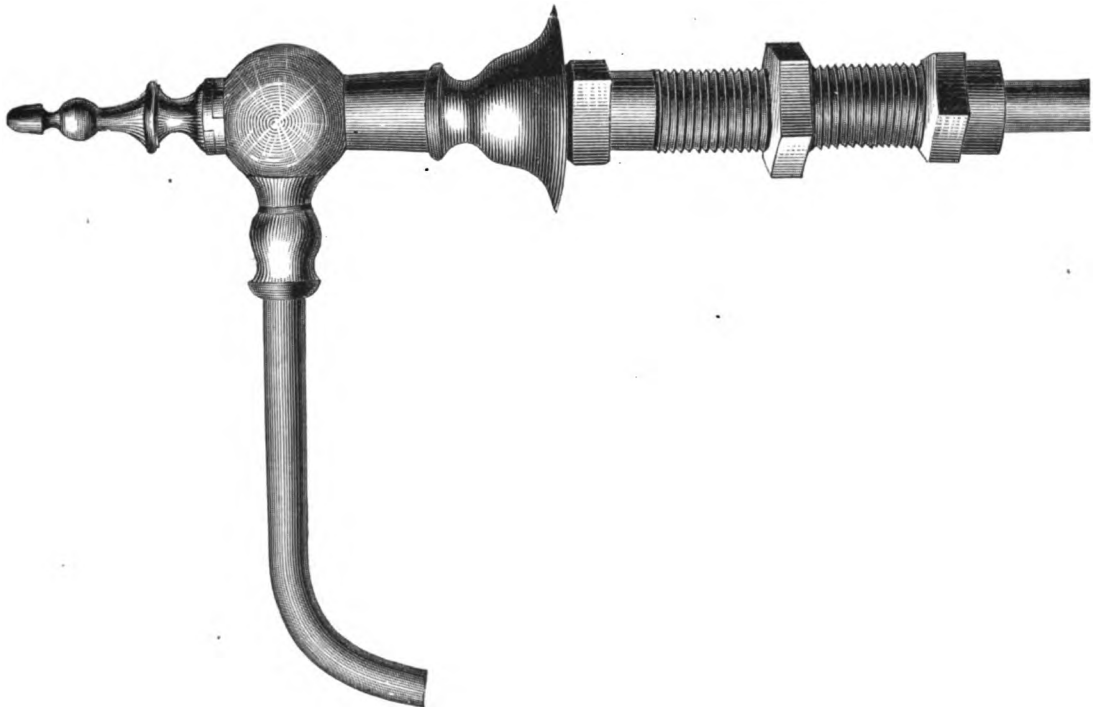


BASIN COCKS.

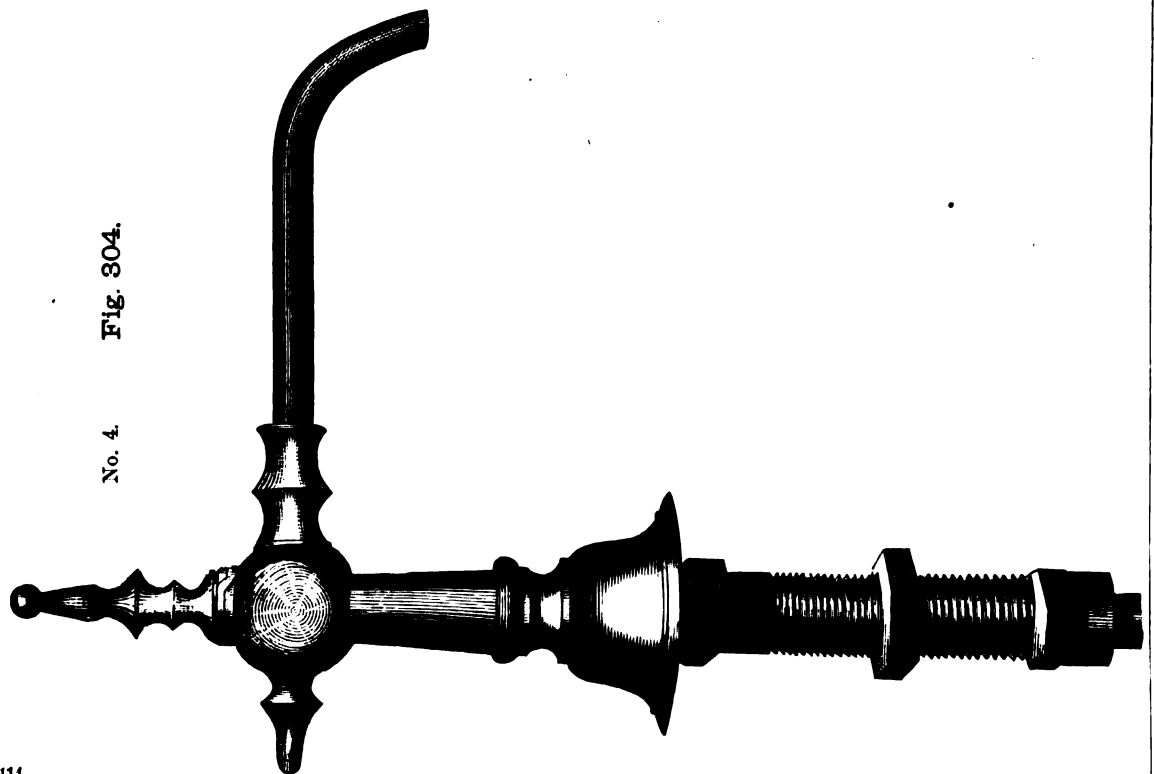
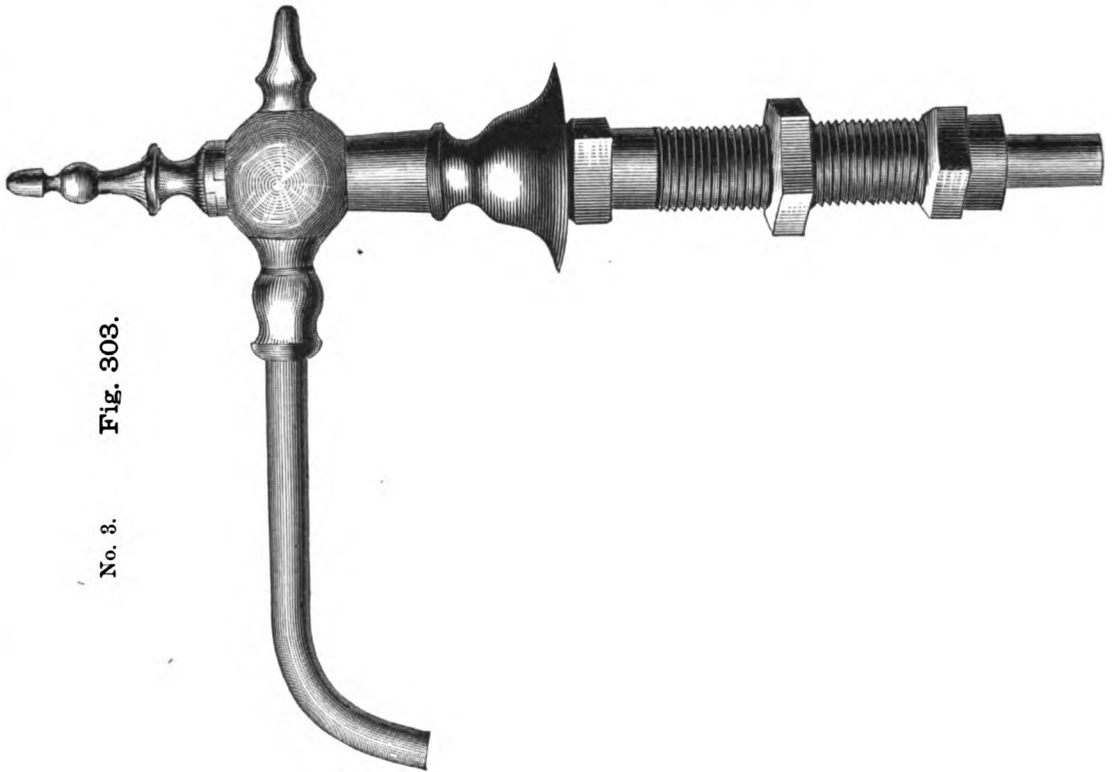
No. 1. Fig. 301.



No. 2. Fig. 302.

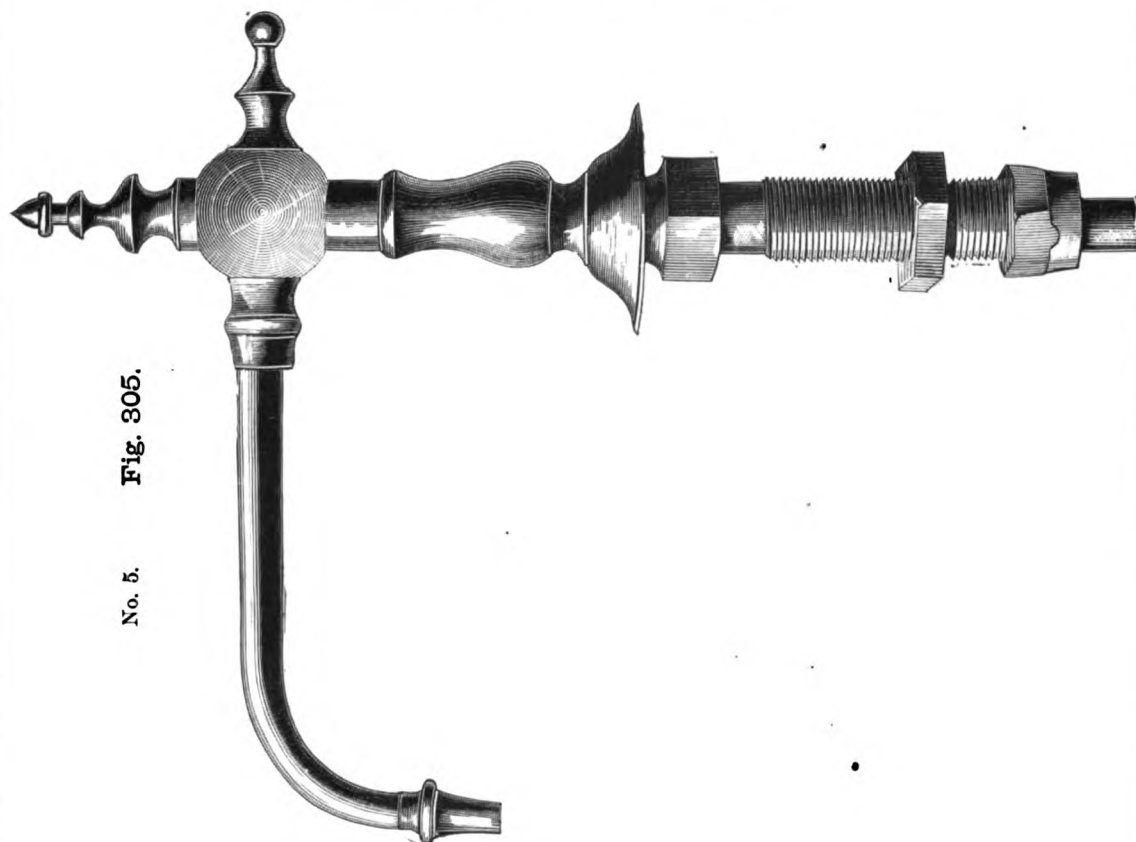


BASIN COCKS.

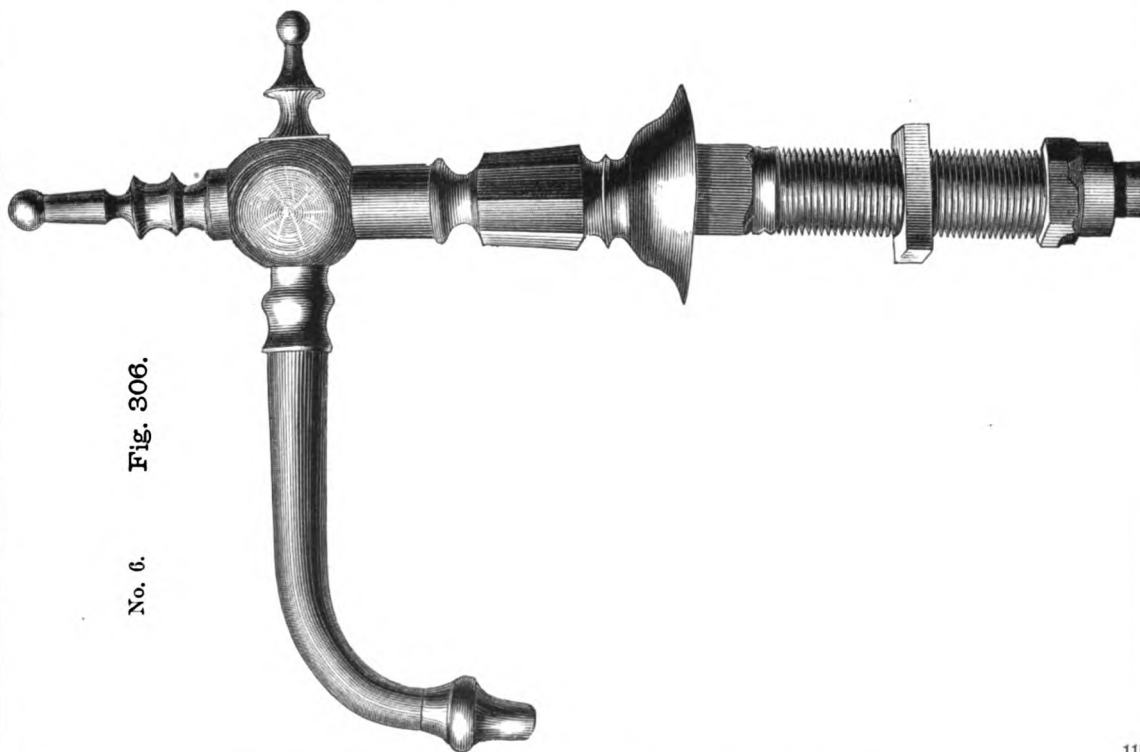


A. CARR, MANUFACTURER, NEW YORK.

BASIN COCKS.



No. 5. Fig. 305.

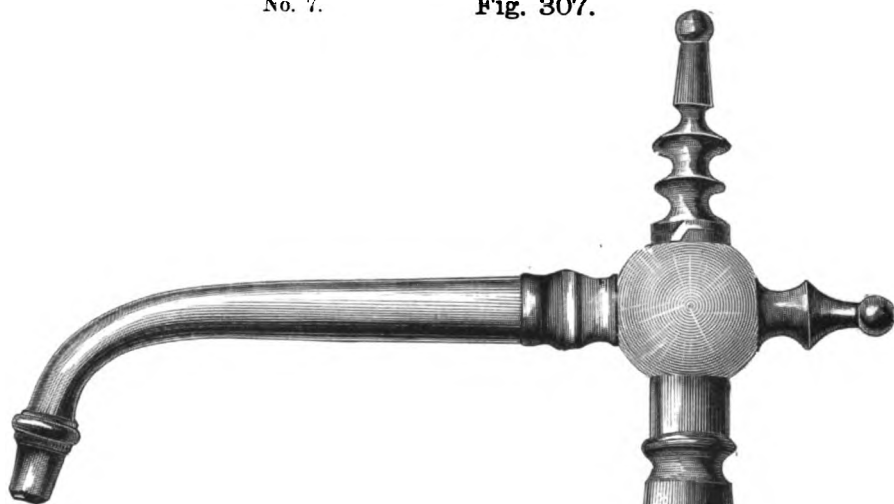


No. 6. Fig. 306.

BASIN COCKS.

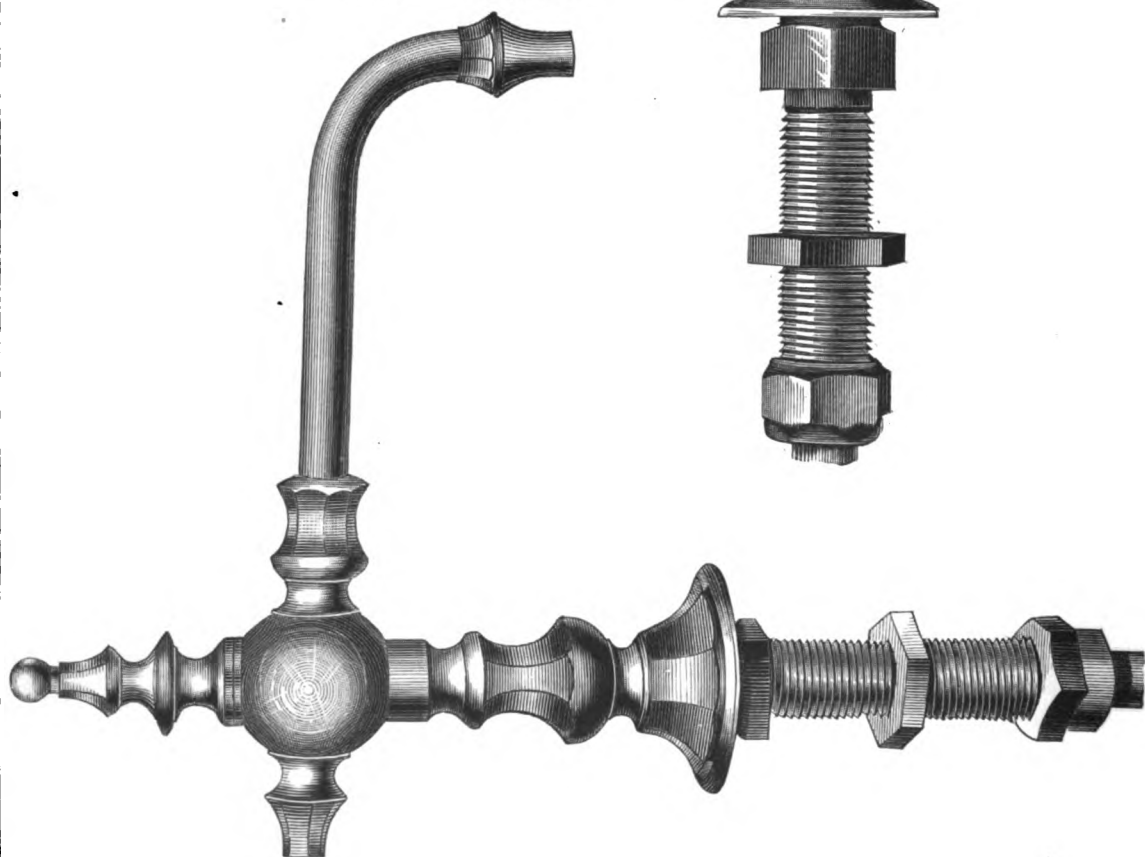
No. 7.

Fig. 307.



No. 8.

Fig. 308.



A. CARP, MANUFACTURER, NEW YORK.

COMPRESSION BASIN COCKS.

Fig. 309.

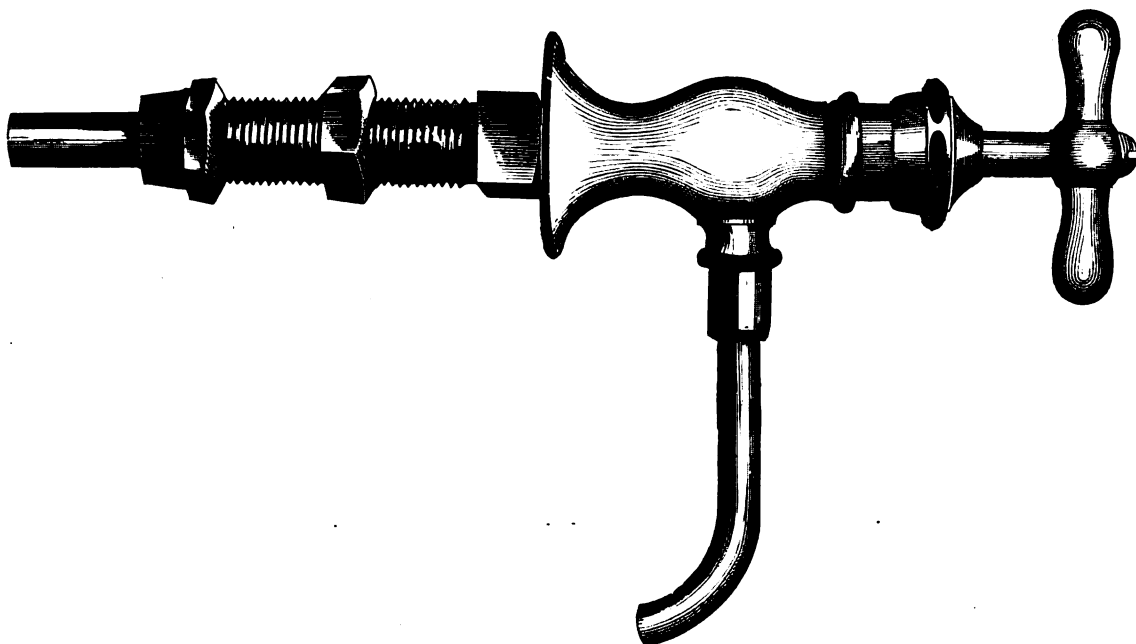
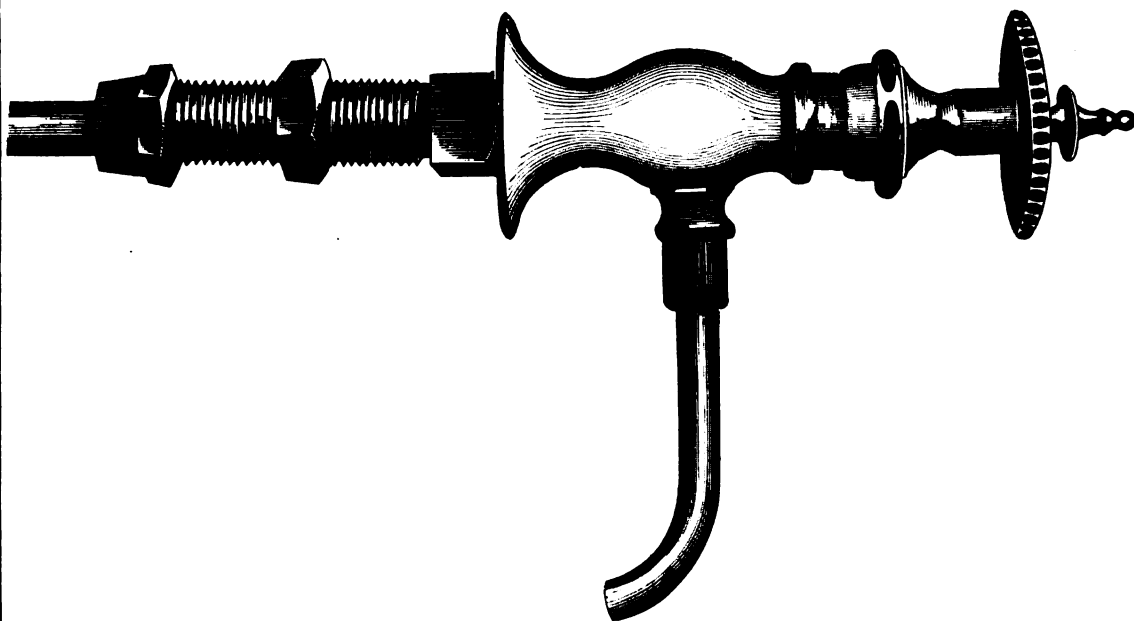


Fig. 310.



BRACKET BASIN COCKS.

Fig. 311.

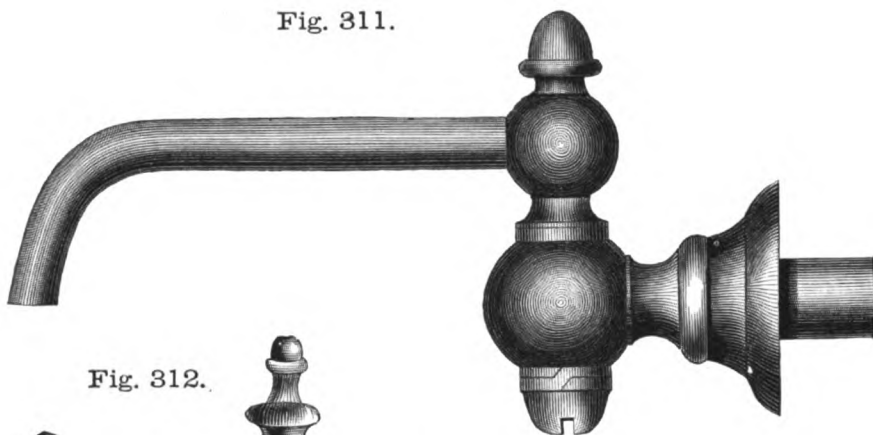
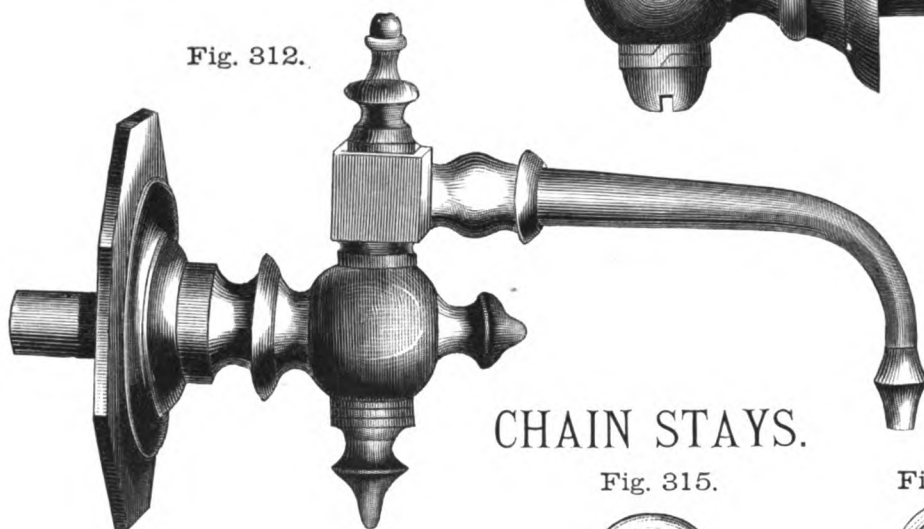


Fig. 312.



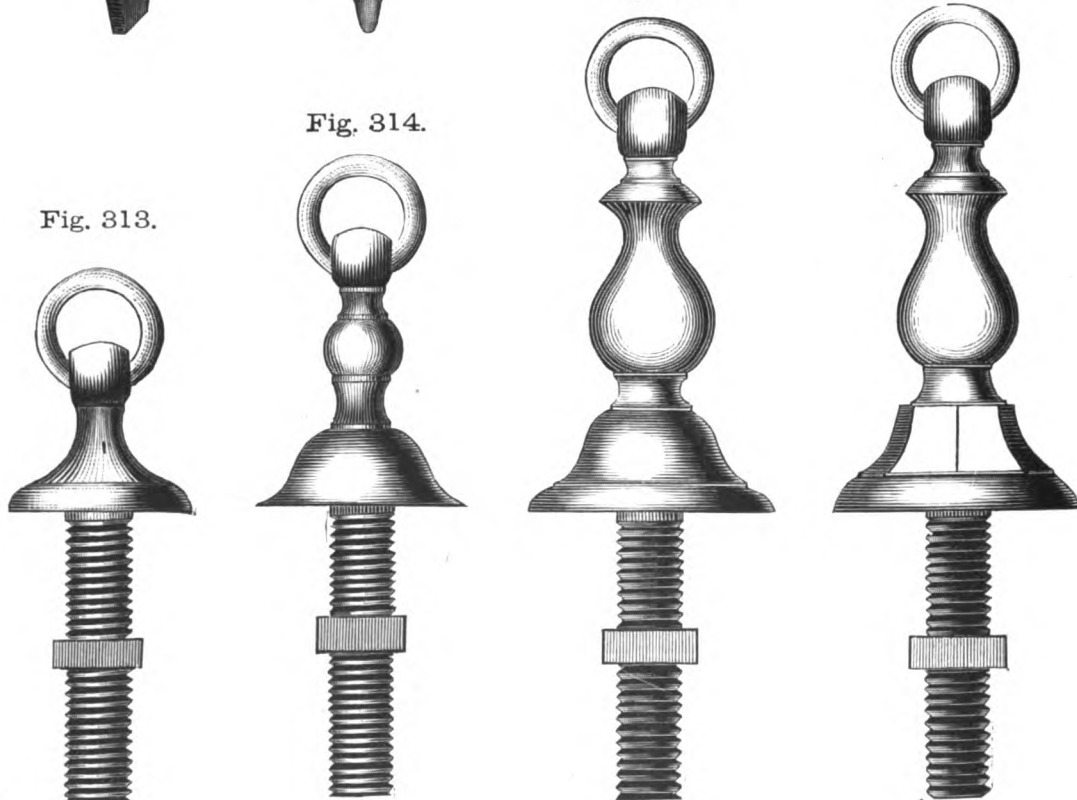
CHAIN STAYS.

Fig. 315.

Fig. 316.

Fig. 314.

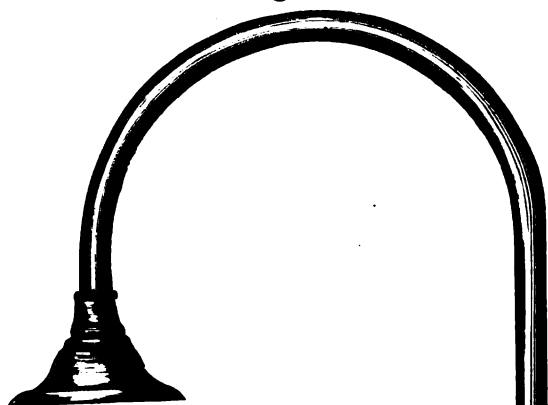
Fig. 313.



A. CARR, MANUFACTURER, NEW YORK.

UPRIGHT SHAMPOOING COCK.

Fig. 317.



SHAMPOOING SPRINKLERS.

No. 1. Fig. 318.

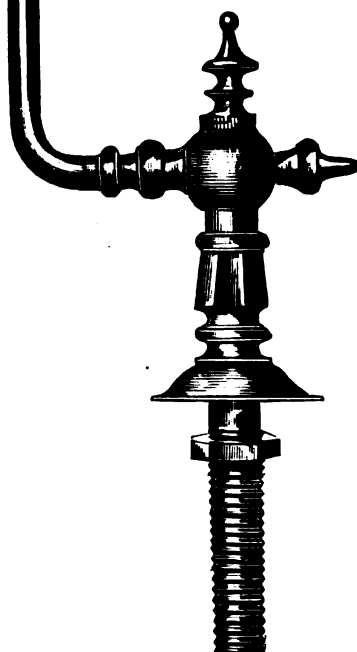
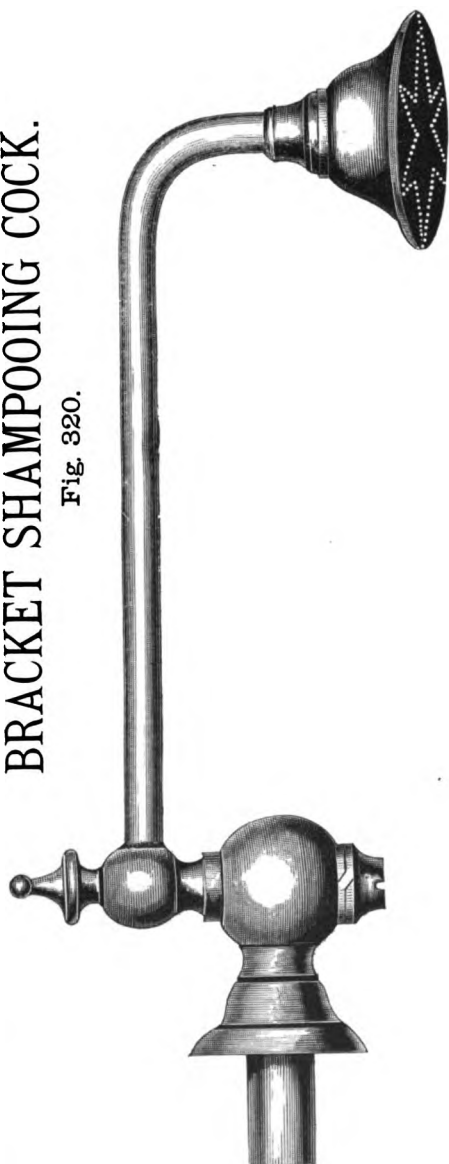


No. 2. Fig. 319.



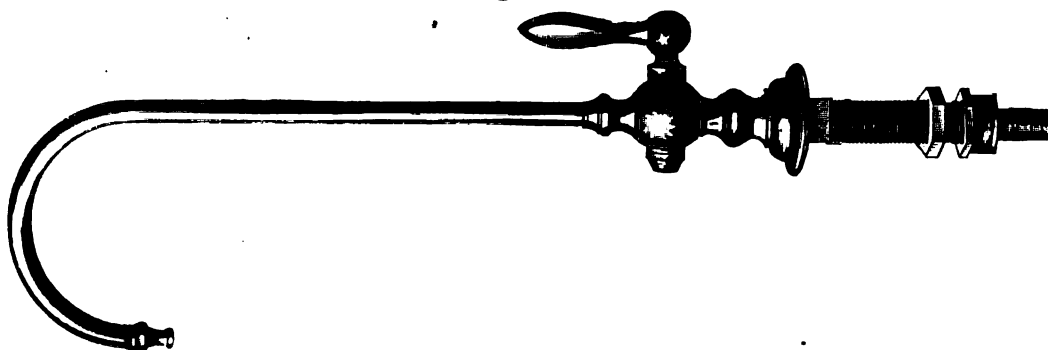
BRACKET SHAMPOOING COCK.

Fig. 320.



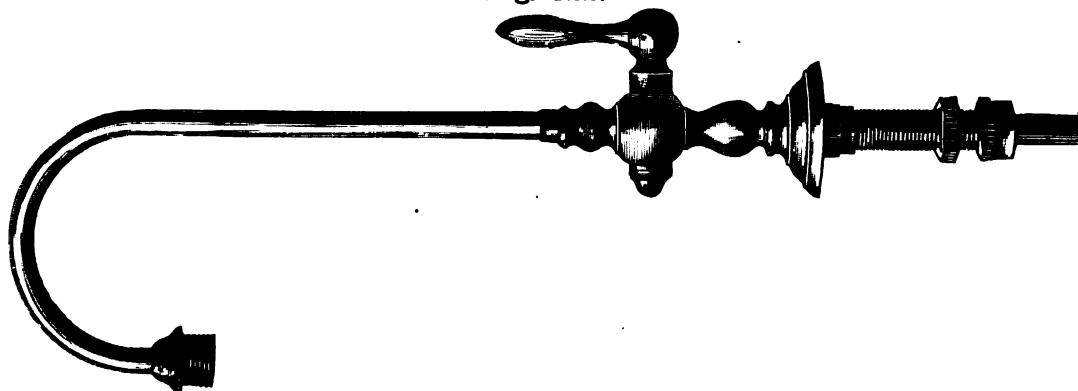
BULER PANTRY COCKS.

Fig. 321.



WITH HOSE NOZZLE FOR FILTER.

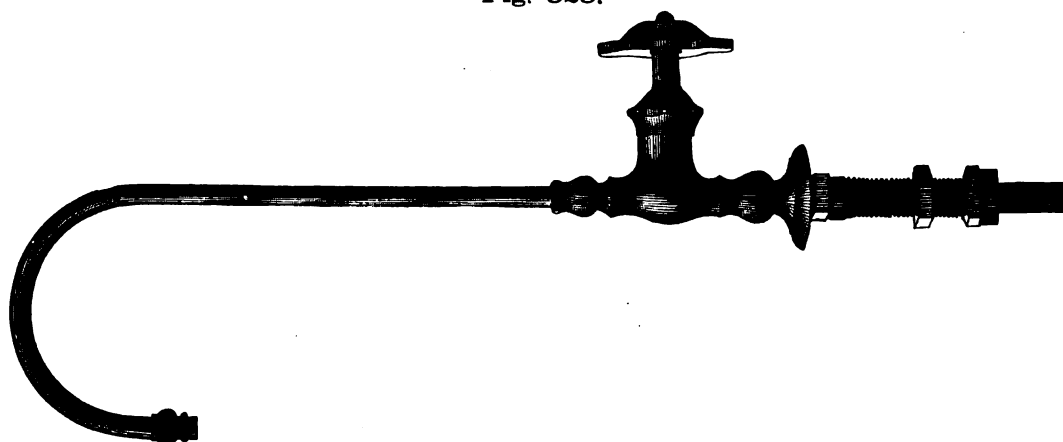
Fig. 322.



COMPRESSION BUTLER PANTRY COCK.

WITH AND WITHOUT HOSE NOZZLE.

Fig. 323.

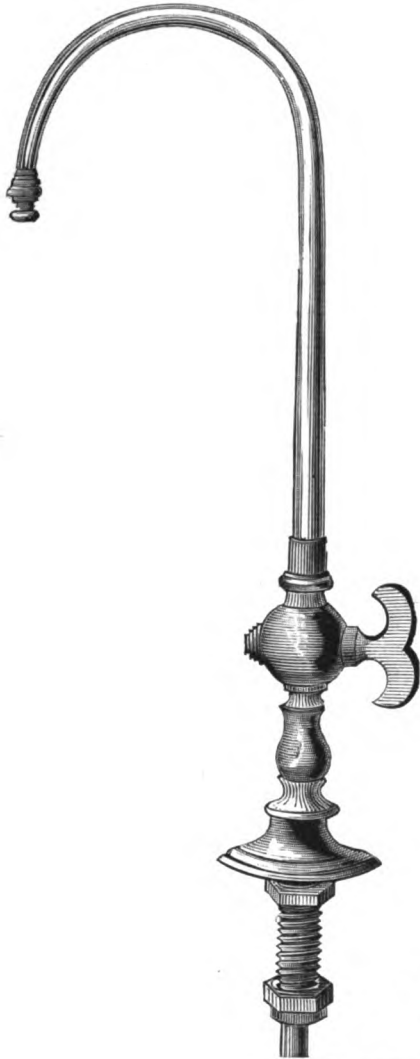


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COUNTER COCKS.

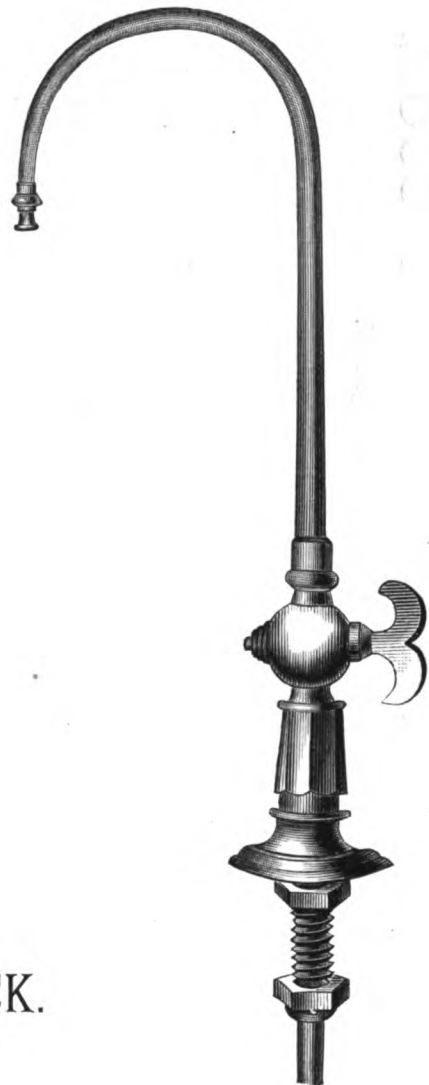
PLAIN.

Fig. 324.



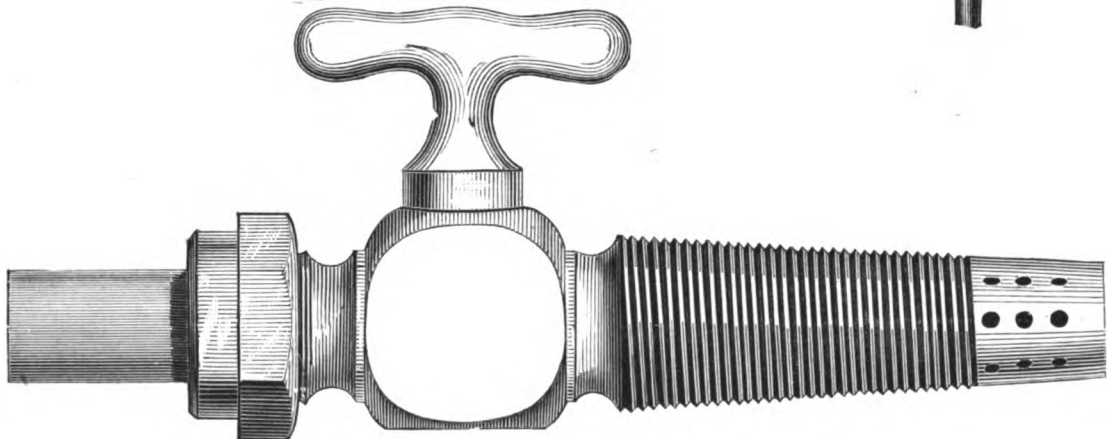
OCTAGON.

Fig. 325.



BEER COCK.

Fig. 326.

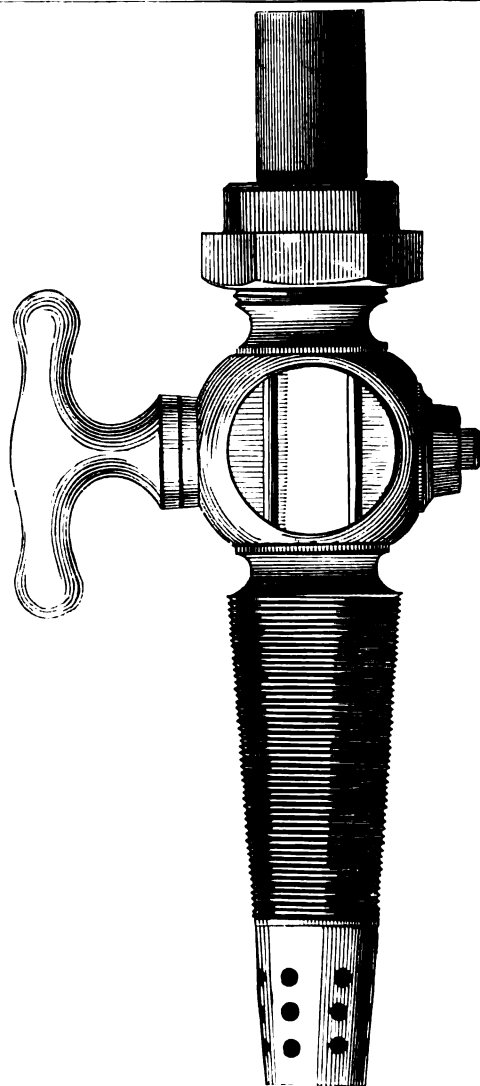


Rivet, and Nut and Washer Bottom.

Sizes, $\frac{1}{4}$, $\frac{3}{8}$ inch.

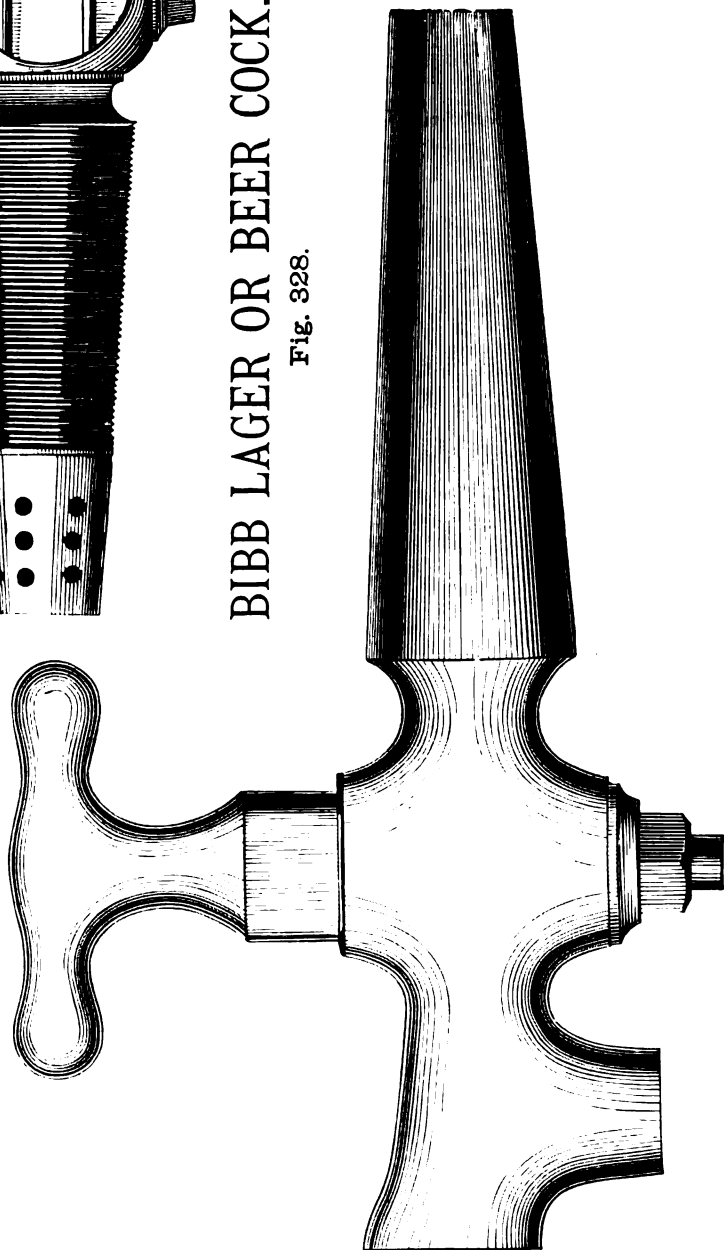
HEAVY BEER COCK.

Fig. 327.



BIBB LAGER OR BEER COCK.

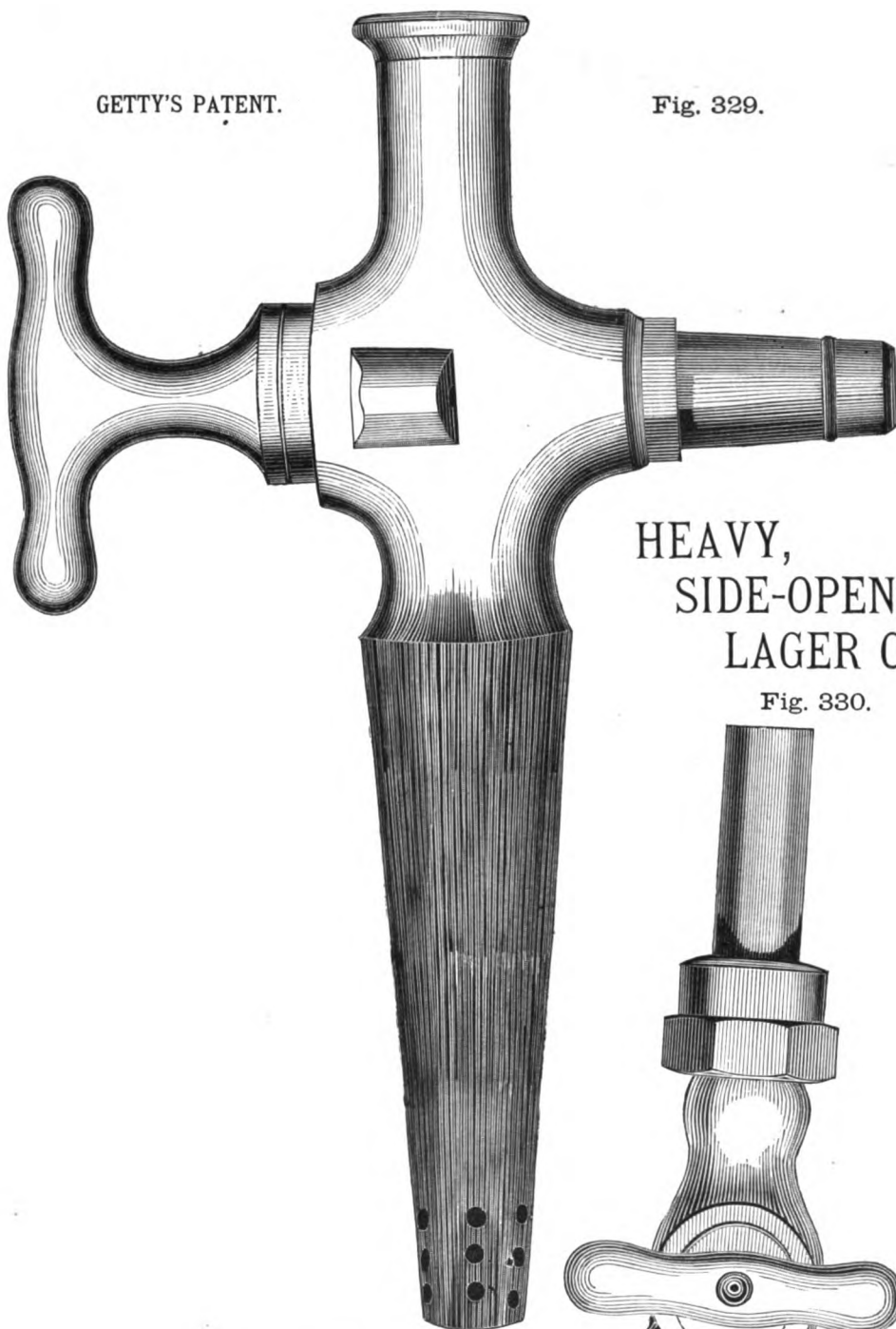
Fig. 328.



SELF-VENTILATING LAGER BEER COCK.

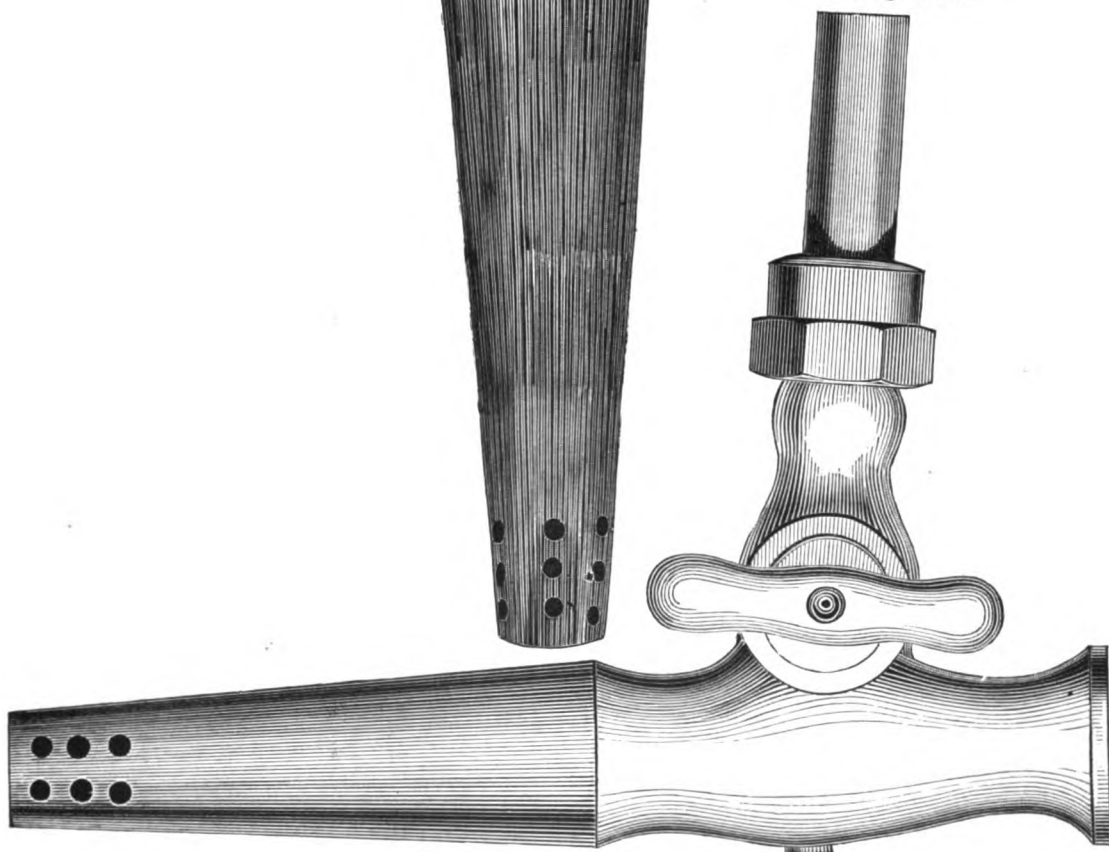
GETTY'S PATENT.

Fig. 329.



HEAVY,
SIDE-OPENING
LAGER COCK.

Fig. 330.



BIBB LAGER COCK, SCREW NOZZLE.

Fig. 331.

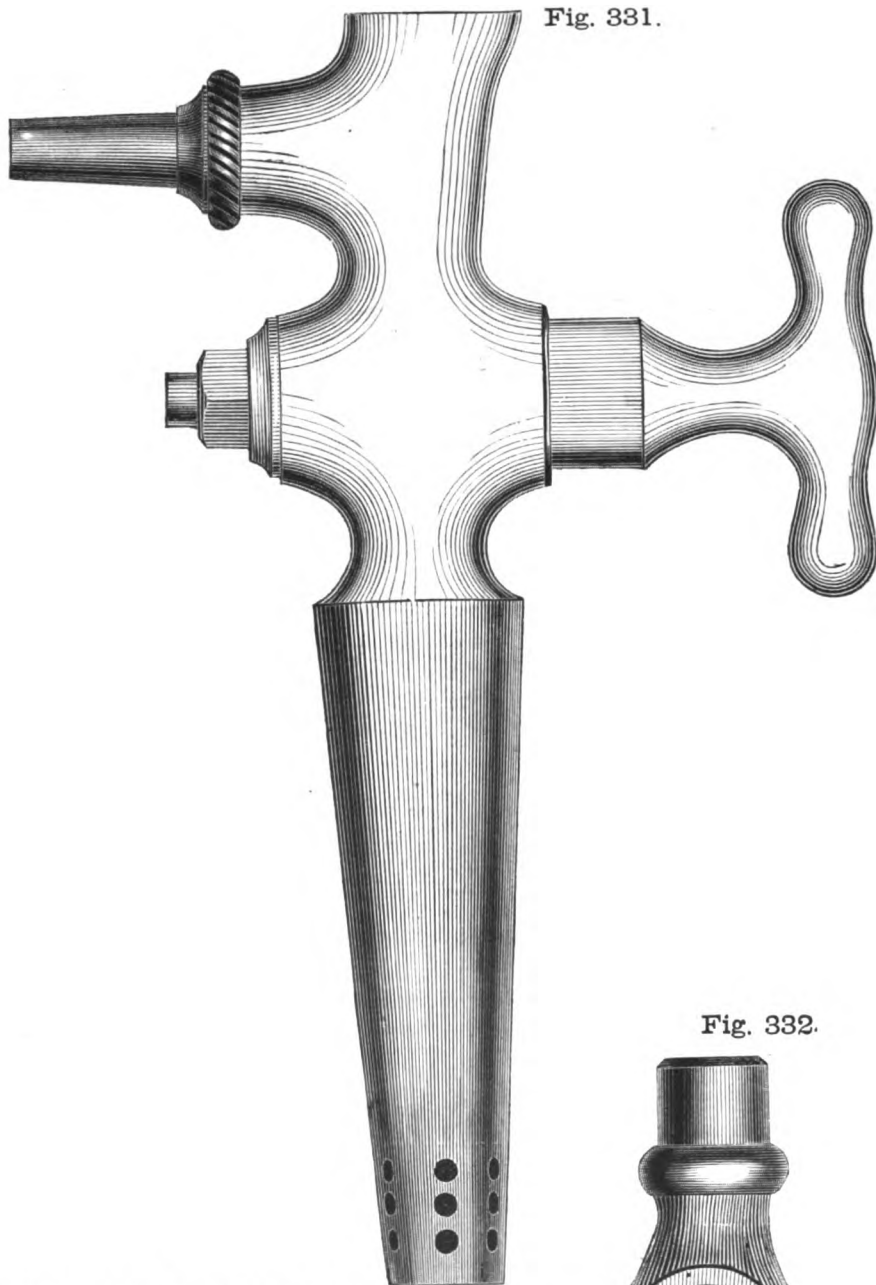
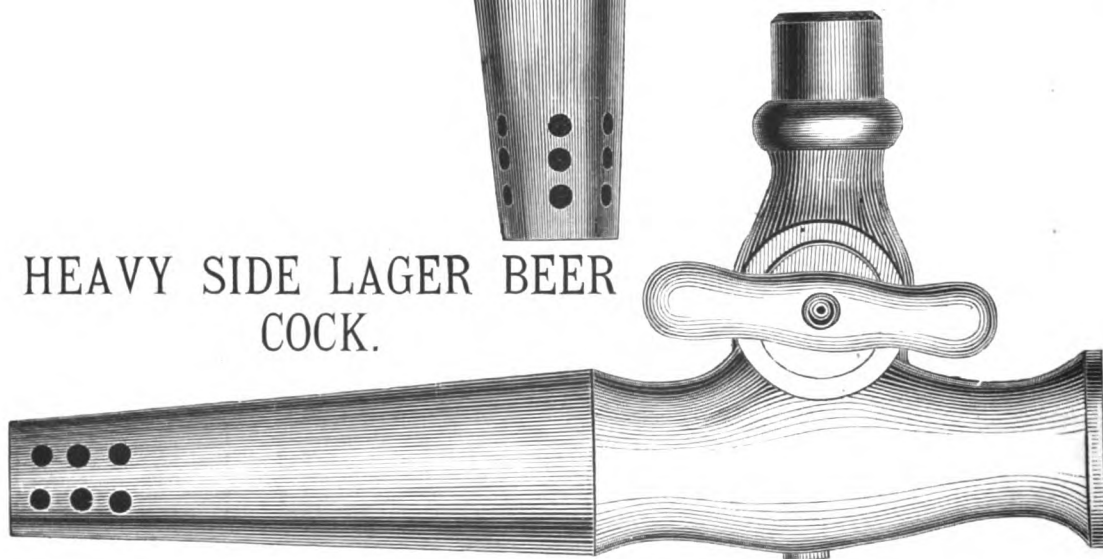


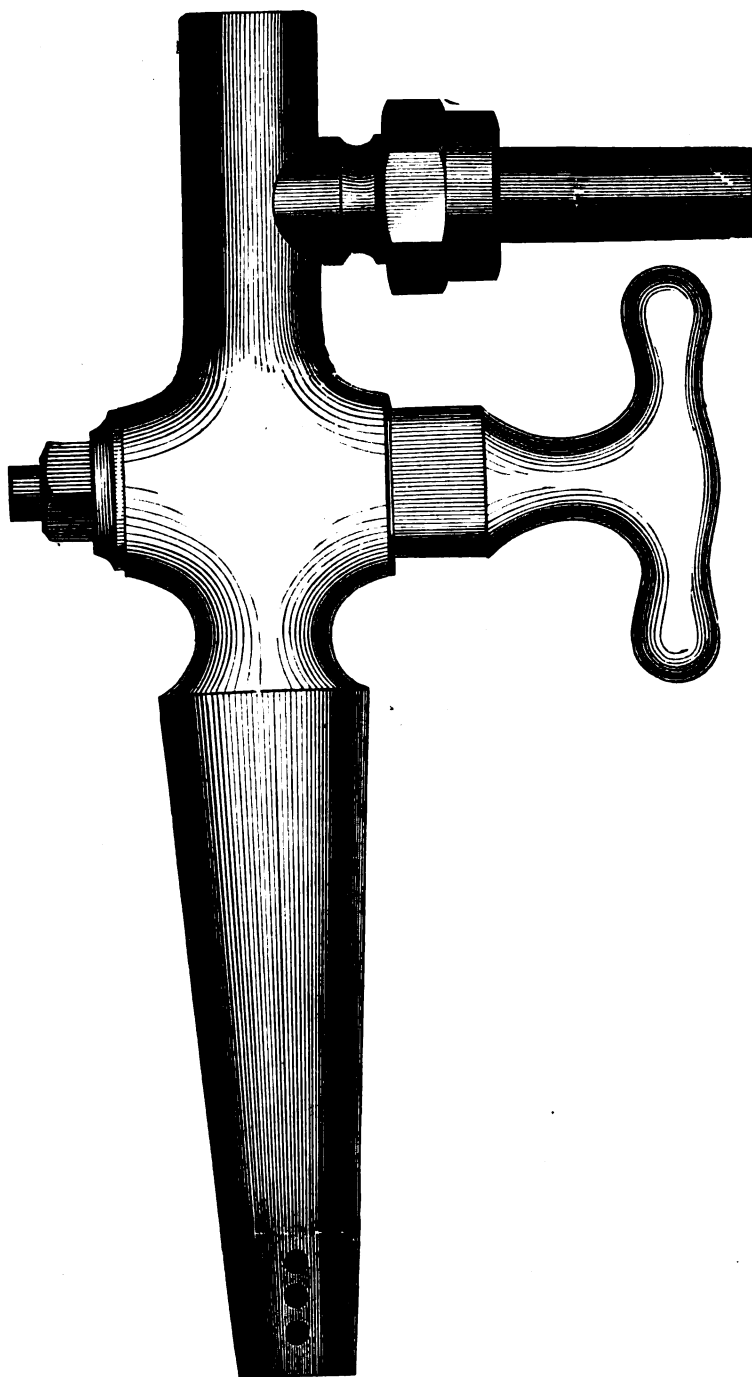
Fig. 332.

HEAVY SIDE LAGER BEER COCK.



BEER COCK.

Fig. 333.



BIBB LAGER COCK, SCREW NOZZLE.

Fig. 331.

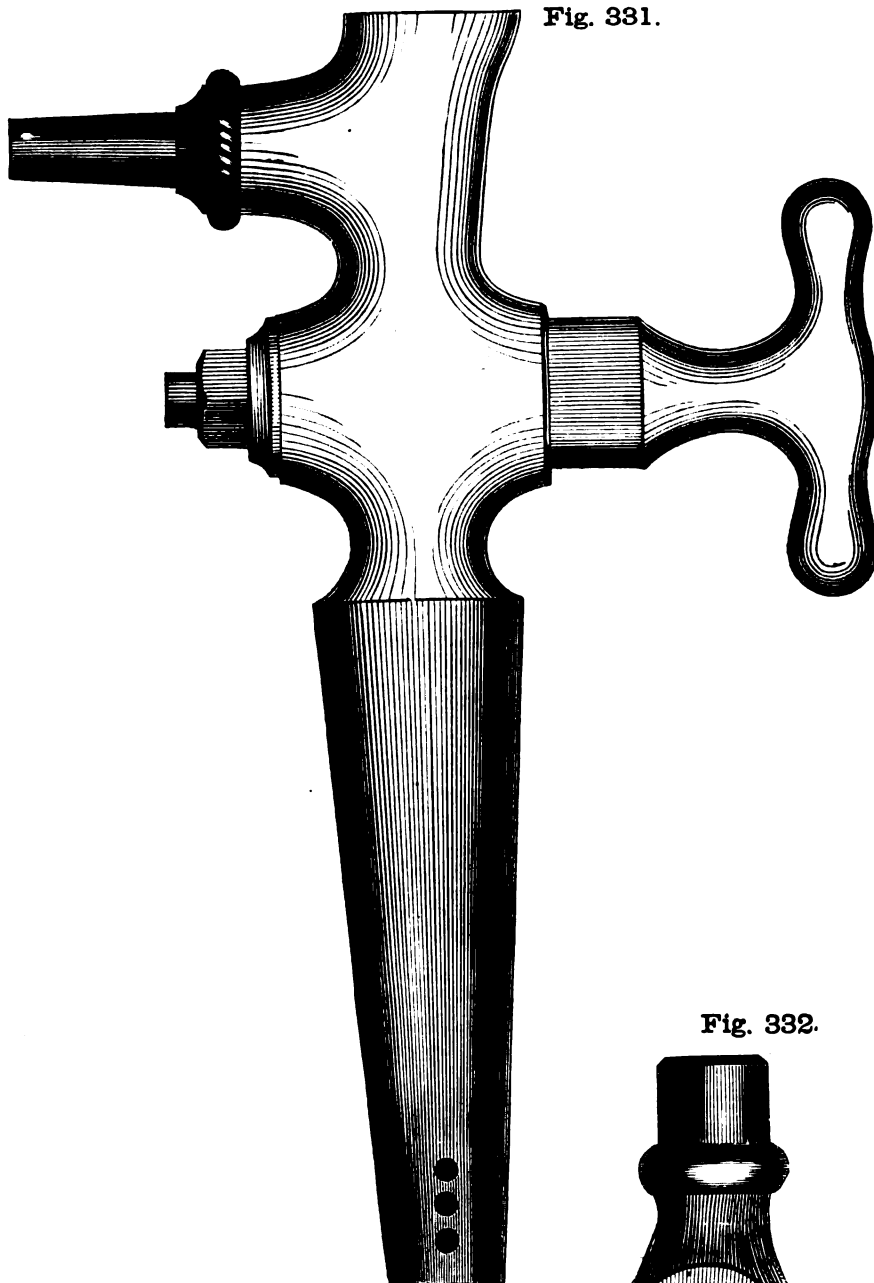
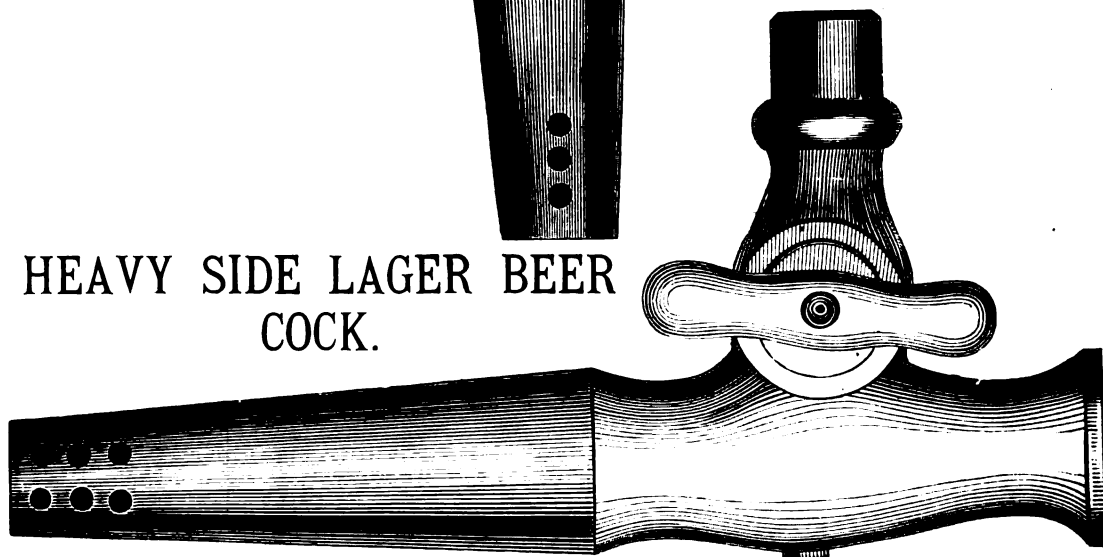


Fig. 332.

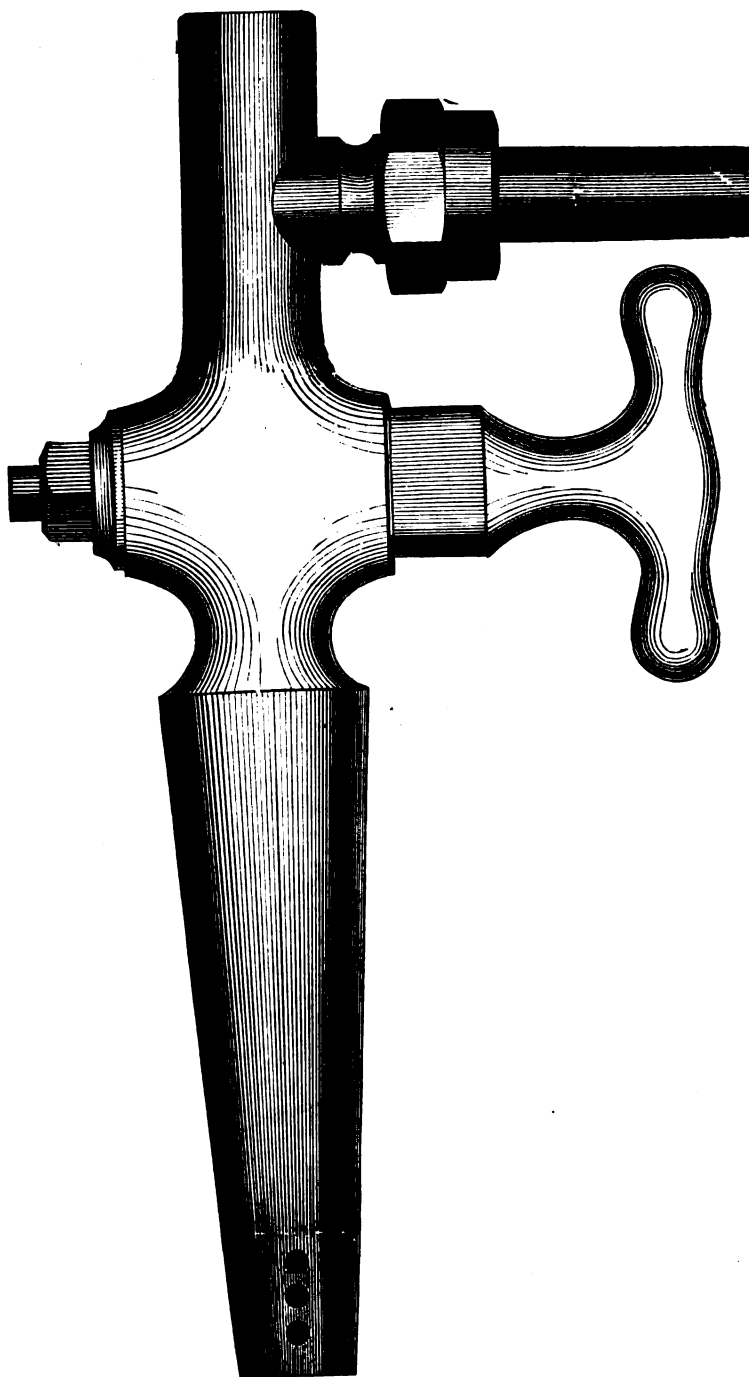
HEAVY SIDE LAGER BEER COCK.



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BEER COCK.

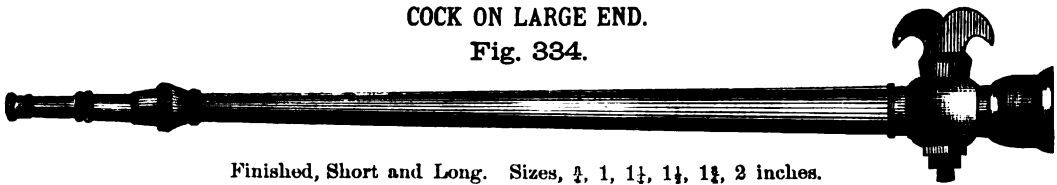
Fig. 333.



HOSE PIPES.

COCK ON LARGE END.

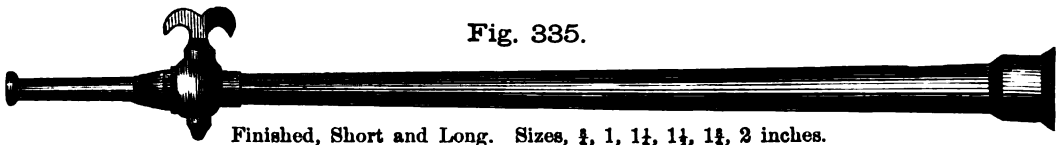
Fig. 334.



Finished, Short and Long. Sizes, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$, 2 inches.

COCK ON SMALL END.

Fig. 335.



Finished, Short and Long. Sizes, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$, 2 inches.

SCREW NOZZLE.

Fig. 336.



Finished, Short and Long. Sizes, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$, 2, $2\frac{1}{2}$, $2\frac{3}{4}$, 3 inches.

SOLDER TIP.

Fig. 337.



Finished, Short and Long. Sizes, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$ inches.

PATENT RUBBER HOSE PIPE AND SPRINKLER.

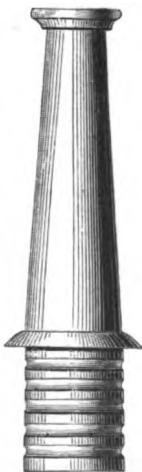
Fig. 337 $\frac{1}{2}$.



Size, $\frac{3}{4}$ inch.

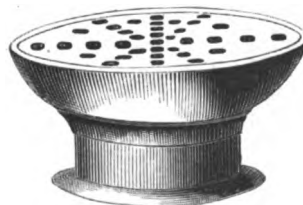
HOSE SPRINKLERS.

HOSE NOZZLE TO TIE.
Fig. 338.



Sizes, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$ inches.

Fig. 339.



For $\frac{3}{4}$, and 1 inch pipes.

Fig. 340.



For $1\frac{1}{4}$ and $1\frac{1}{2}$ inch pipes.

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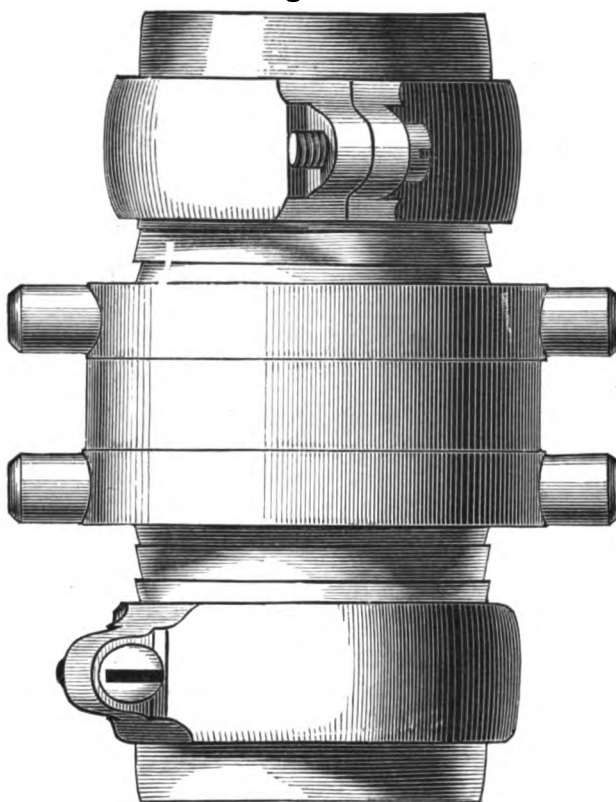
HOSE COUPLINGS FOR RUBBER HOSE.

Fig. 341.



Sizes, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$, 2, $2\frac{1}{4}$, $2\frac{1}{2}$, 3, 4, 5, 6, 7, 8 inches.

Fig. 342.

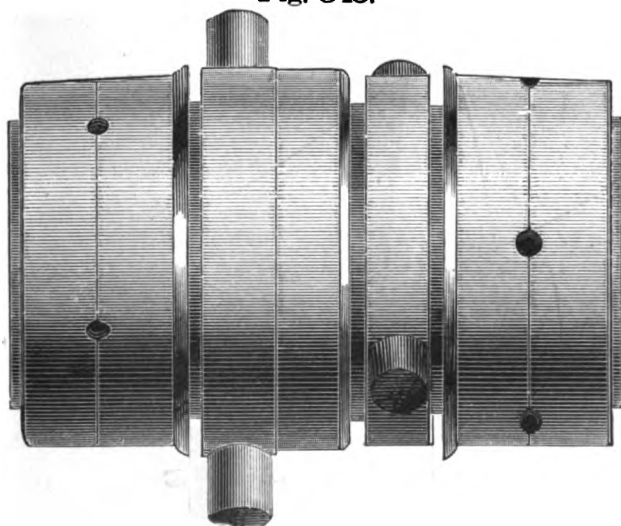


With Clamps. Sizes, $2\frac{1}{4}$, $2\frac{1}{2}$, 3 inches.

HOSE COUPLING

FOR LEATHER HOSE.

Fig. 343.

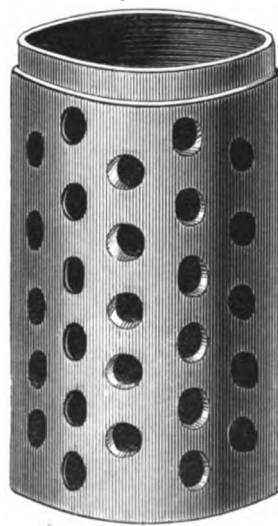


With Bands. Sizes, 2, $2\frac{1}{4}$, $2\frac{1}{2}$, 3 inches.

SUCTION BASKET,

TO SCREW ON HOSE COUPLING.

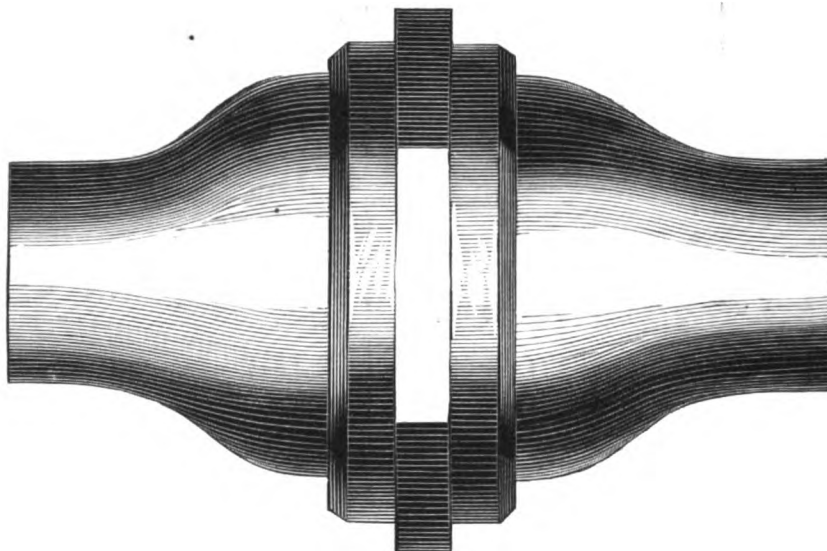
Fig. 344.



Sizes, 2, $2\frac{1}{4}$, 3, 4, 5, 6, 7, 8 inches.

VALVE COUPLING FOR LEAD OR IRON PIPE.

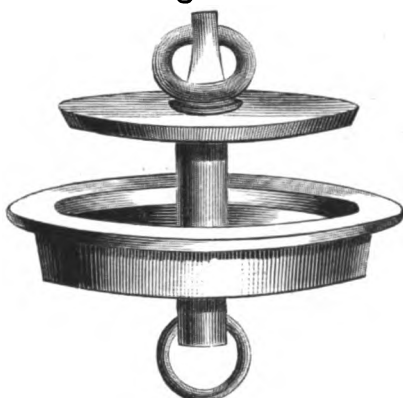
Fig. 345.



Sizes, $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{2}$, $1\frac{3}{4}$, 2, $2\frac{1}{2}$ inches.

BATH VALVES.

Fig. 346.



2 inch.

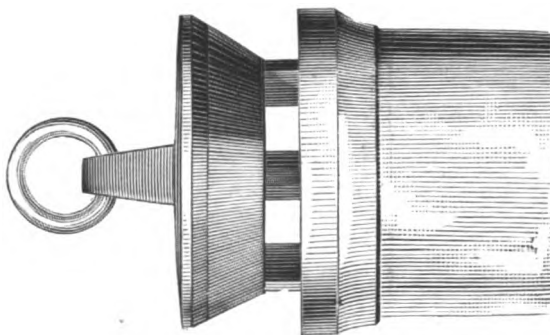
Fig. 347.



Sizes, $\frac{1}{2}$, 1, $1\frac{1}{2}$ inches.

BASIN VALVE.

Fig. 348



BATH WASTE WITH STAND PIPE.

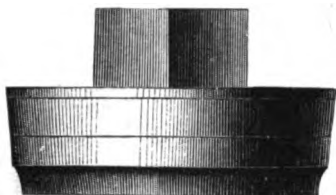
Fig. 349.



Sizes, 1, 1½, 1¾ inches.

TRAP SCREW.

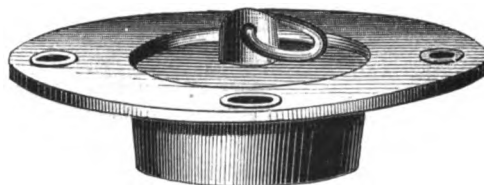
Fig. 350.



Sizes, 1, 1½, 1¾, 2, 2½, 3, 4 inches.

WASH TRAY PLUG.

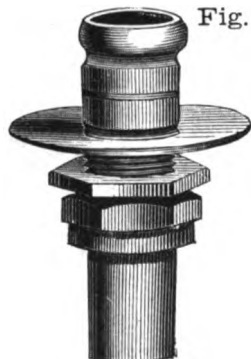
Fig. 351.



Sizes, 1, 1½, 1¾, 1½, 2, 2½ inches.

BATH WASTE & WASHER FOR IRON TUB.

Fig. 352.



Sizes, 1½, 1¾ inches.

BATH WASTE AND WASHER.

Fig. 353.



Sizes, 1, 1½, 1¾, 2, 2½, 3, 4 inches.

SINK PLUG.

Fig. 354.



Finished and Plated. Sizes, 1, 1½, 1¾, 1½, 2, 2½ inches.

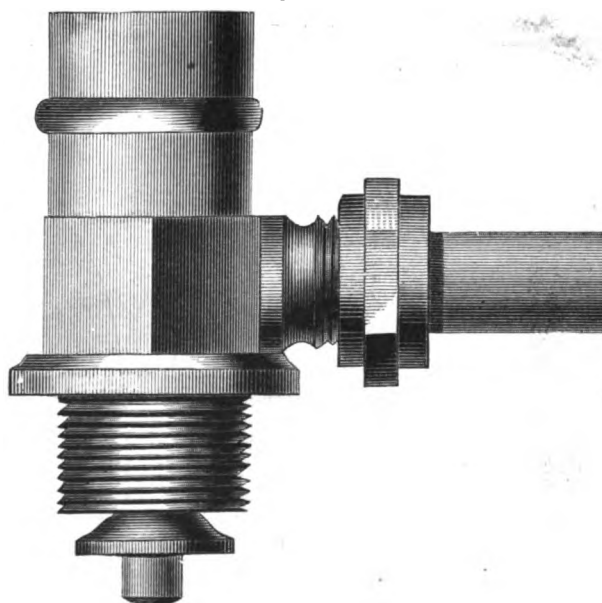
**VACUM VALVE.
FOR LEAD OR IRON PIPE.**

Fig. 355.



**VACUM VALVE WITH COUPLING.
FOR LEAD OR IRON PIPE.**

Fig. 356.



SAFETY VALVE FOR BOILERS.

Fig. 357.

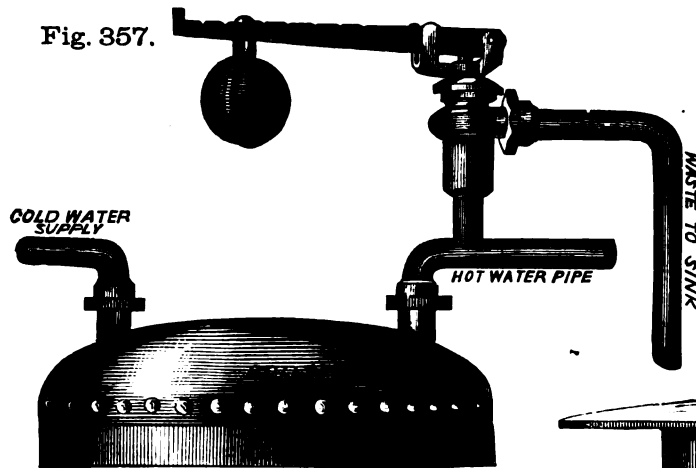
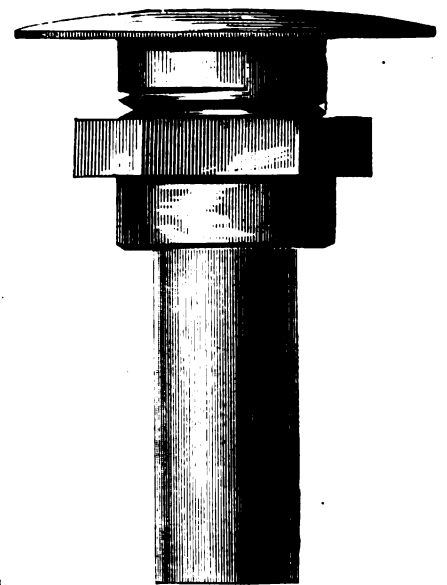


Fig. 359.



BOILER COUPLINGS.

Fig. 358.

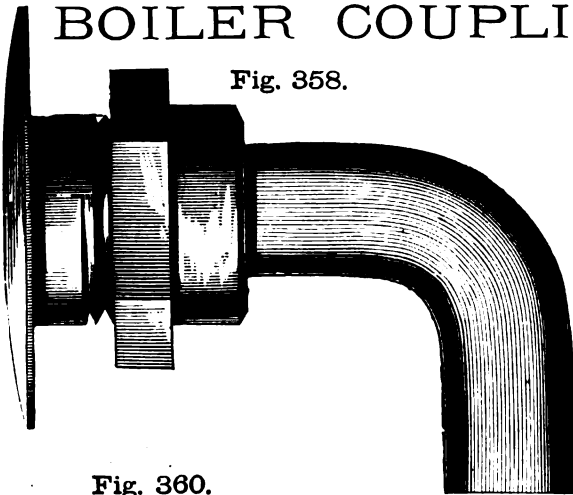
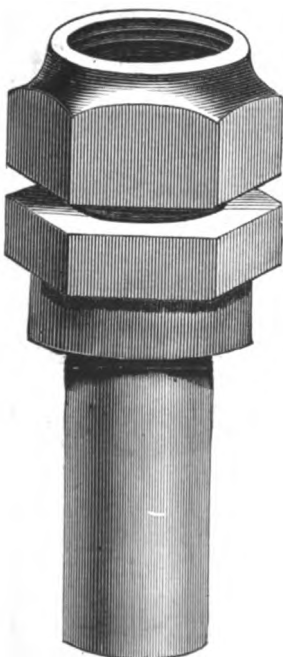


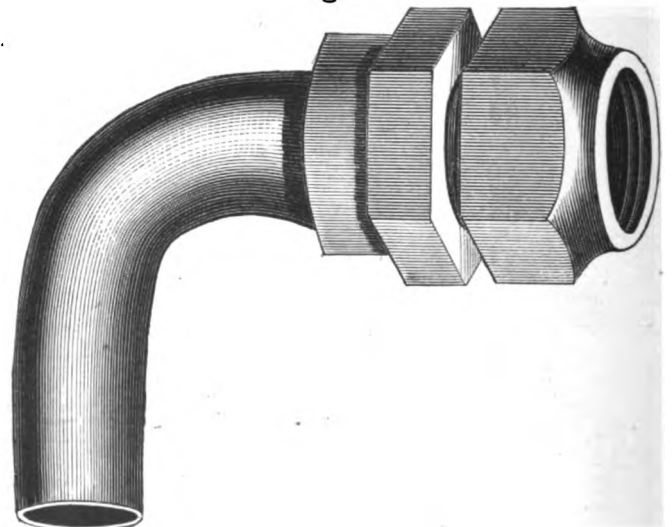
Fig. 360.

Sizes, $\frac{1}{4}$, 1 inch.



WATER-BACK COUPLINGS.

Fig. 361.

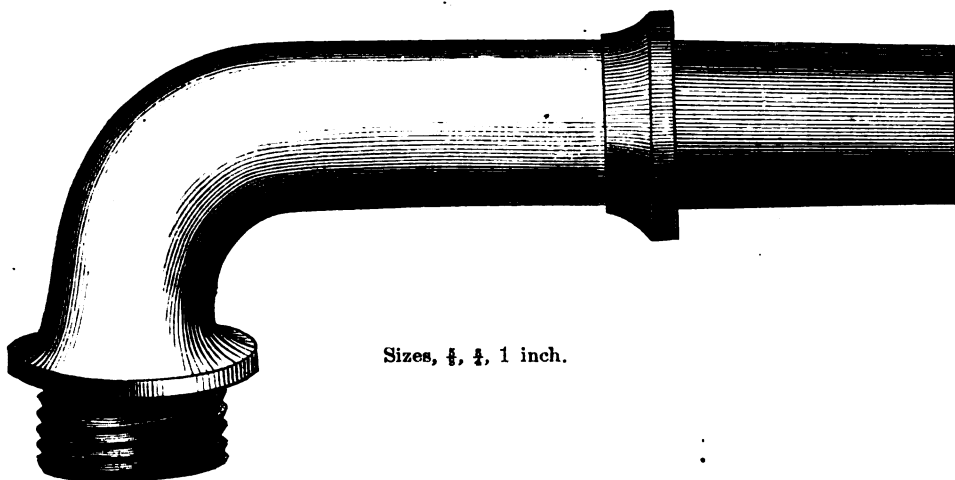


Sizes, $\frac{1}{4}$, $\frac{1}{2}$, 1 inch.

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HYDRANT NOZZLES.

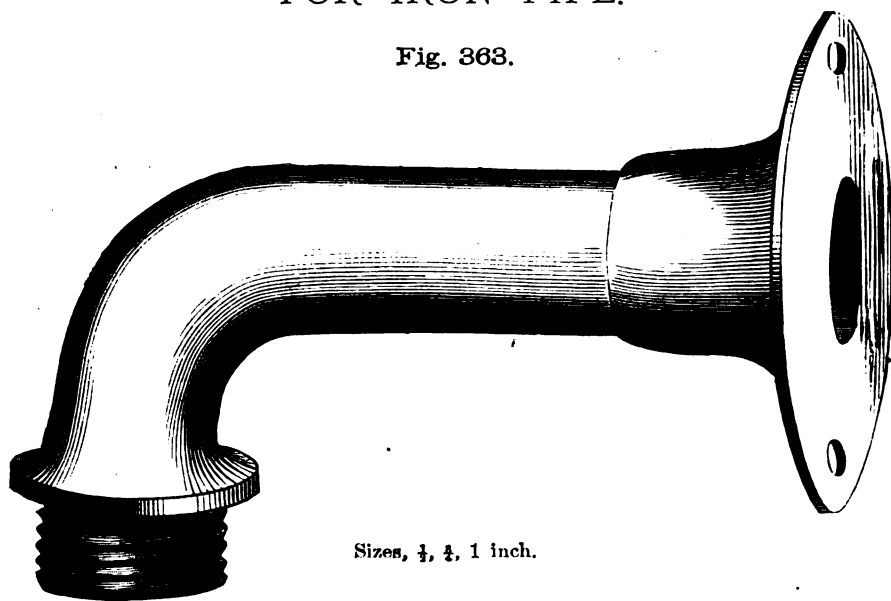
Fig. 362.



Sizes, $\frac{1}{2}$, $\frac{3}{4}$, 1 inch.

FOR IRON PIPE.

Fig. 363.

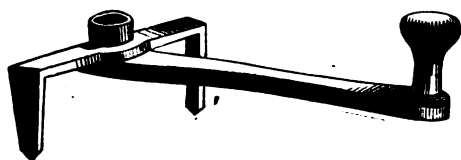


Sizes, $\frac{1}{2}$, $\frac{3}{4}$, 1 inch.

HYDRANT STAYS AND HANDLES.

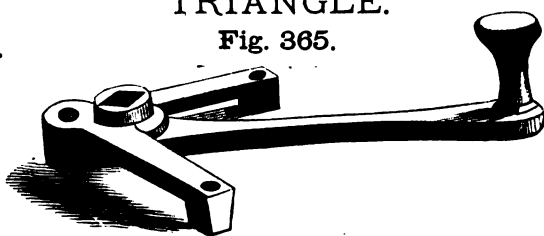
STRAIGHT.

Fig. 364.



TRIANGLE.

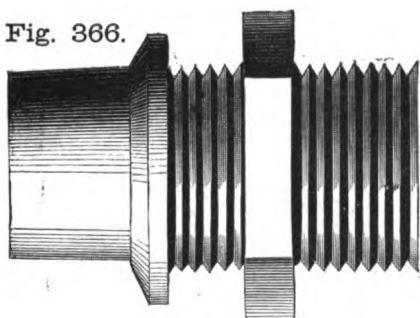
Fig. 365.



STREET WASHER SCREWS.

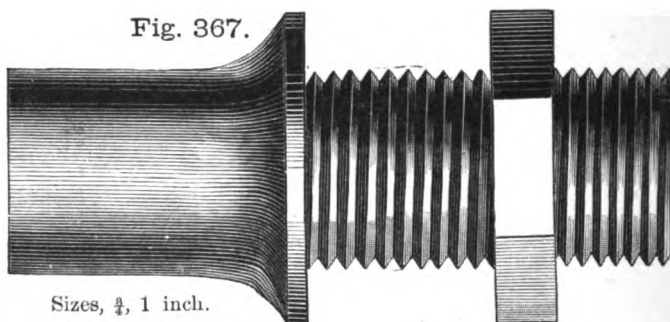
SHORT.

Fig. 366.



LONG.

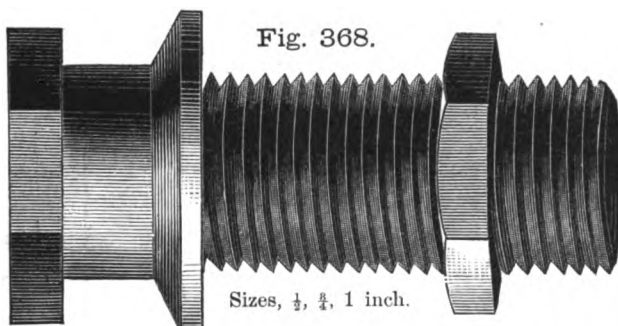
Fig. 367.



Sizes, $\frac{1}{4}$, 1 inch.

FOR IRON PIPE.

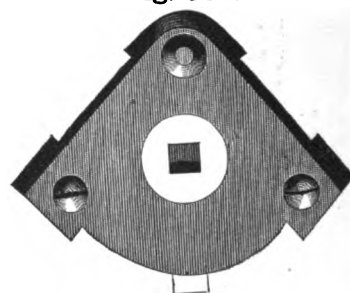
Fig. 368.



Sizes, $\frac{1}{4}$, $\frac{3}{8}$, 1 inch.

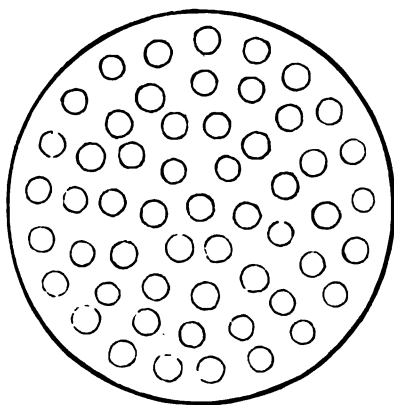
STREET WASHER CHECK.

Fig. 369.



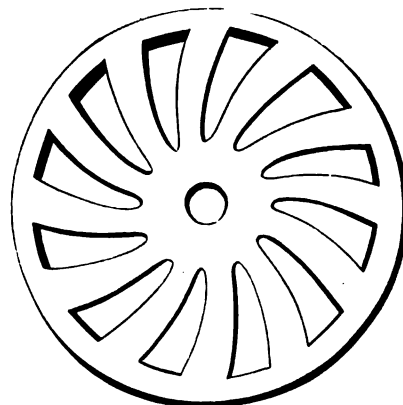
ROUND HOLE STRAINER.

Fig. 370.



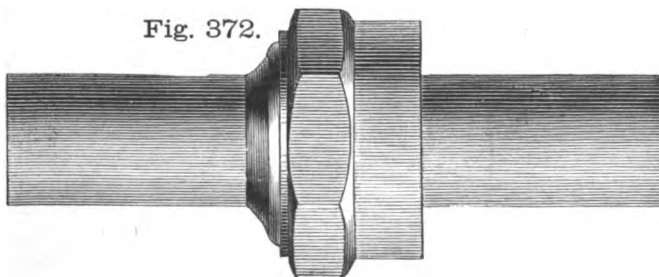
FANCY STRAINER.

Fig. 371.



PLAIN COUPLING.

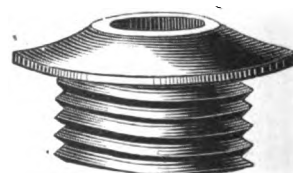
Fig. 372.



Sizes, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1, 1 $\frac{1}{4}$, 1 $\frac{1}{2}$, 1 $\frac{3}{4}$, 2, 2 $\frac{1}{2}$, 3 inches.

HOSE BIBB END.

Fig. 373.

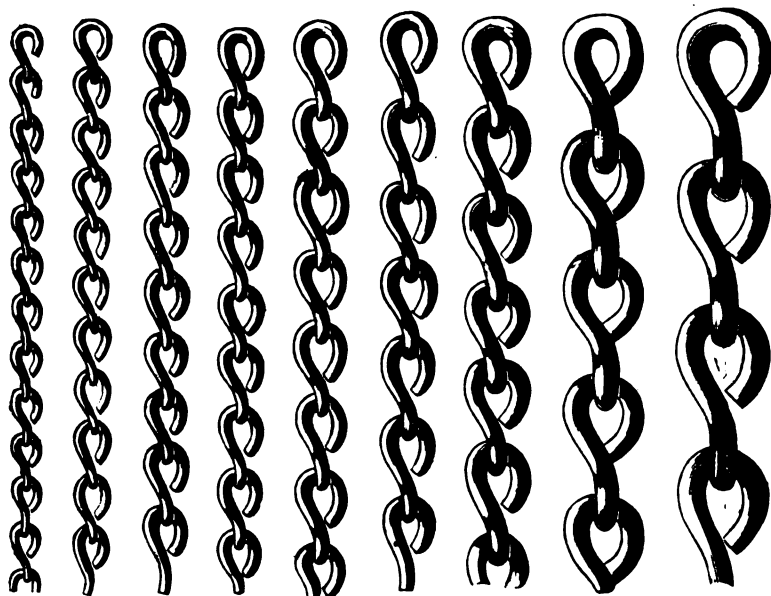


For $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, 1, 1 $\frac{1}{4}$, 1 $\frac{1}{2}$, 2 inch Bibbs.

BRASS CHAIN, PLAIN AND PLATED.

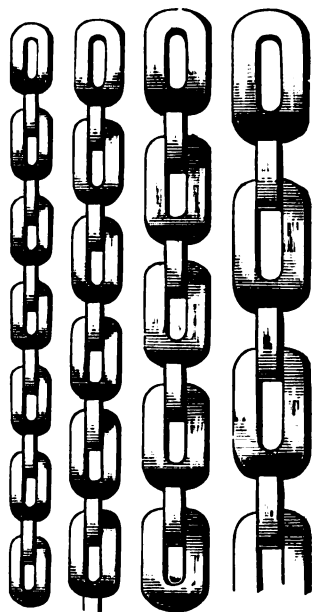
SINGLE CHAIN.

Fig. 374.



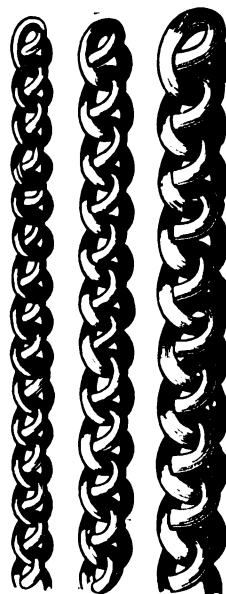
SAFETY CHAIN.

Fig. 375.



DOUBLE CHAIN.

Fig. 376.



BASIN CLAMPS.

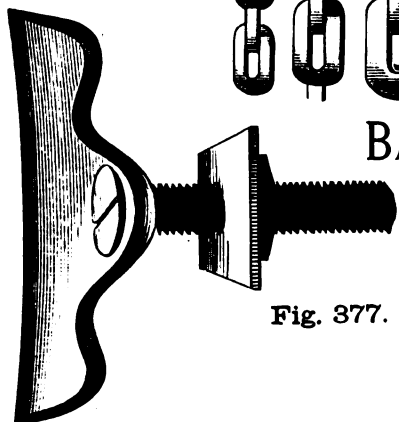


Fig. 377.

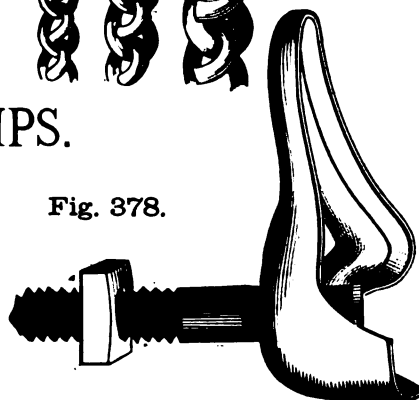
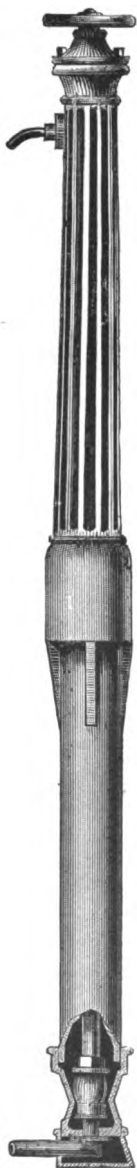


Fig. 378.

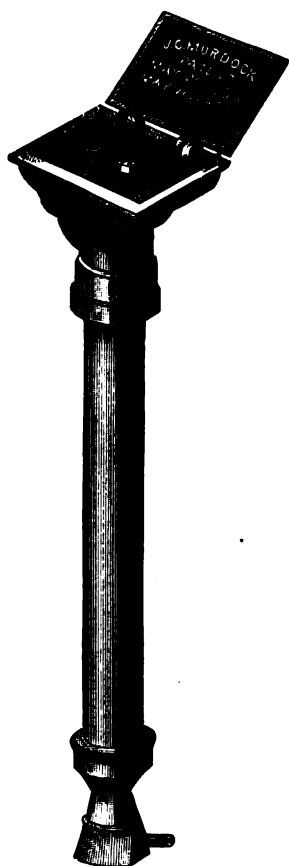
MURDOCK'S PATENT HYDRANT & HOSE BOX.

Fig. 378.



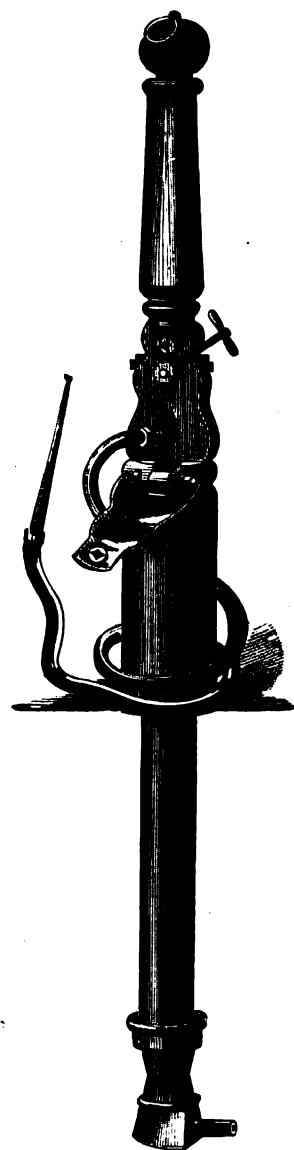
Hydrant.

Fig. 379.



Hose Box.

Fig. 380.



Hose Box with Hitching Post.

A. CARR, MANUFACTURER, NEW YORK.

HYDRANTS.

BARTHOLEMEW'S PATENT.

Fig. 381.

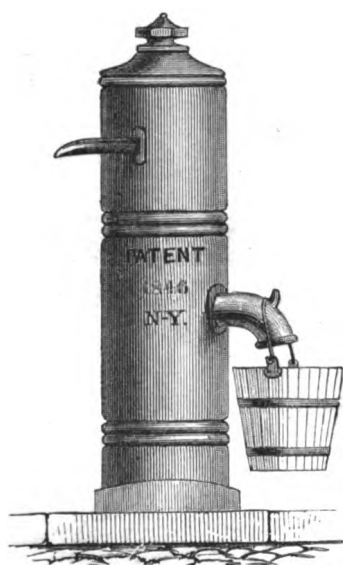
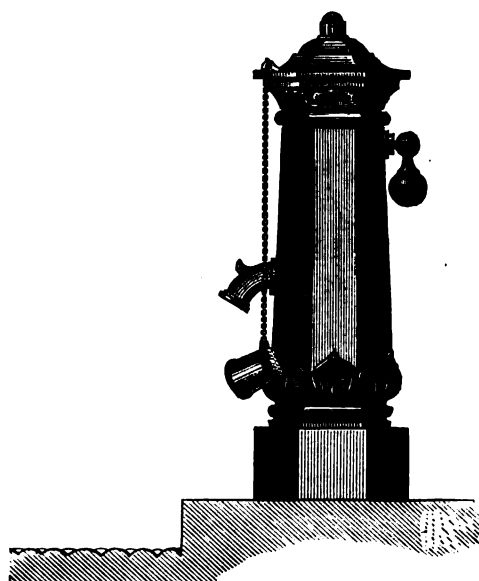
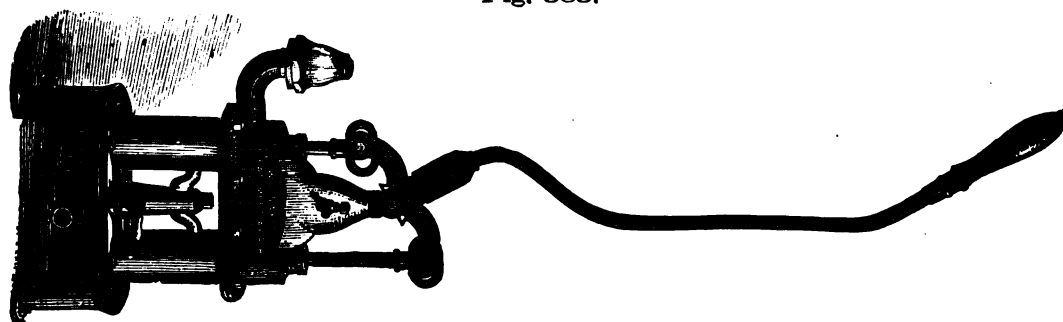


Fig. 382.



BAXTER'S PATENT LIFT AND FORCE PUMP.

Fig. 383.



PLUMBER'S COPPER WORK.

Fig. 384.

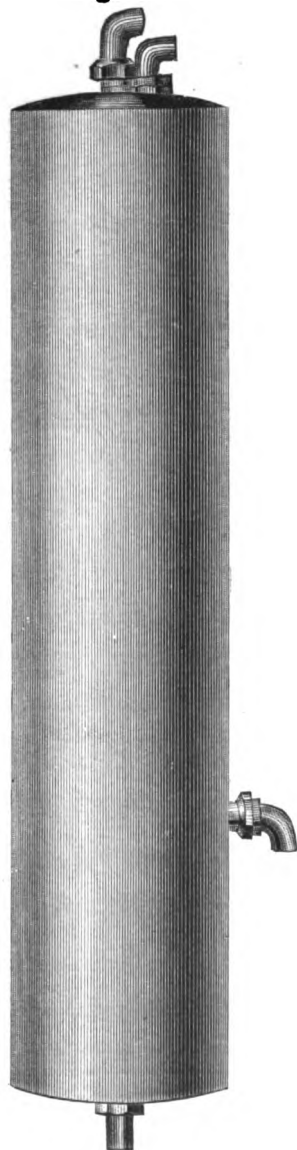
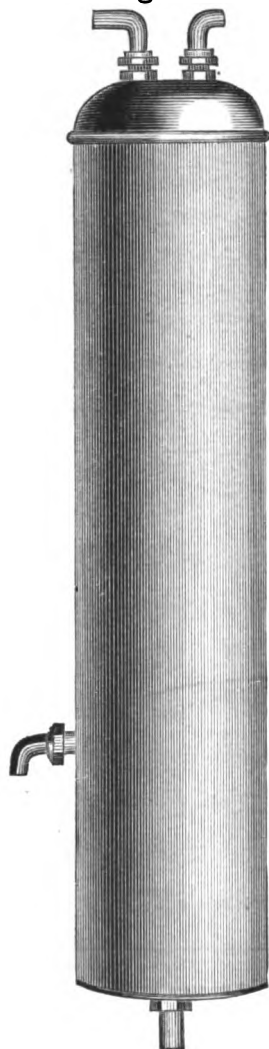
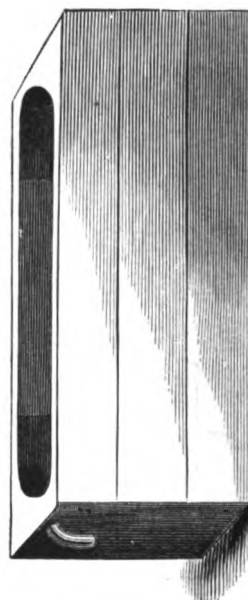


Fig. 385.



FRENCH BATH TUB.

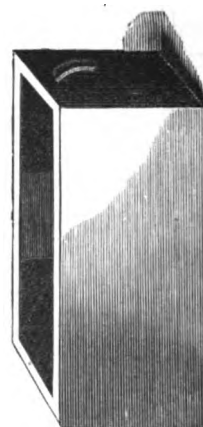
Fig. 387.



Size, 4 feet 6 inches long.

FOOT-BATH TUB.

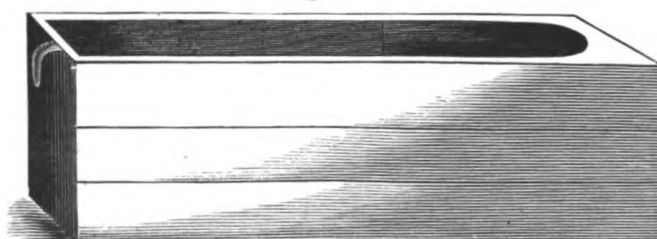
Fig. 386.



Size, 1 foot 8 inches.

BATH TUB.

Fig. 388.



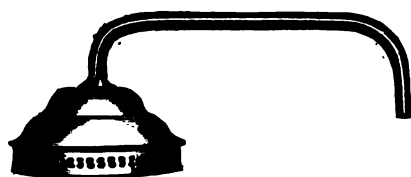
Sizes, 5, 5½, and 6 feet.

A. CARP. MANUFACTURER, NEW YORK.

PLUMBER'S COPPER WORK.

SHOWERS.

Fig. 389.



Plain.

Fig. 390.



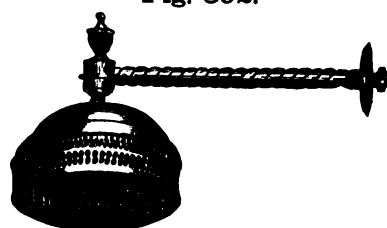
Fancy.

Fig. 391.



Fancy Tubular.

Fig. 392.



Fancy Tubular with Flange and Thimble.

Fig. 393.



Fancy with Flange and Thimble.

Fig. 394.



Tubular.

COPPER BALL FOR BALL COCKS.

Fig. 395.



Sizes, 4, 5, 6, 7, 8, 9, 10, 12 inches.

COPPER SINKS.

Fig. 396.

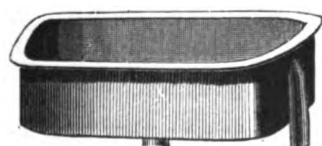


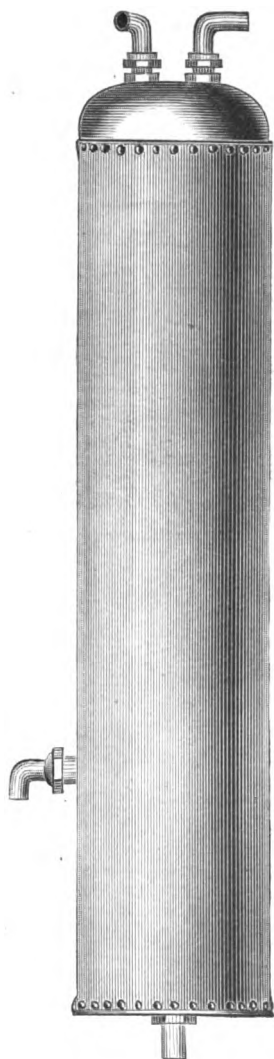
Fig. 397.



Sizes, 12x20, 13x21, 14x16, 14x20, 14x24, 16x24, 18x30.

GALVANIZED IRON BOILER.

Fig. 398.



CAST LEAD TRAPS & BENDS,

LOWE'S PATENT.

Fig. 399.

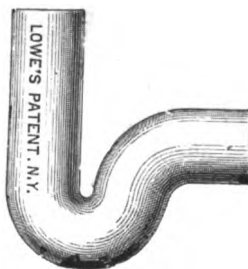


Fig. 400.

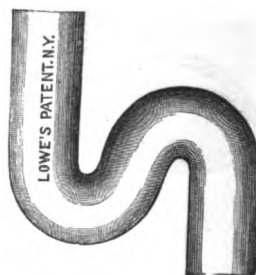


Fig. 401.



Fig. 402.

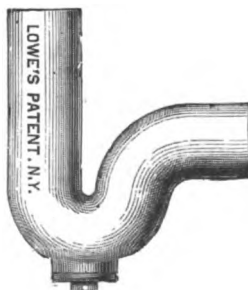
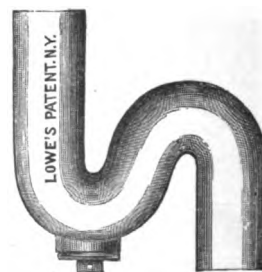


Fig. 402†



Capacity.	Size.
18 gallons.	3 ft. by 12 ins.
21 "	3 1/4 " 12 "
24 "	4 " 12 "
30 "	5 " 12 "
36 "	6 " 12 "
44 "	8 " 14 "
52 "	9 " 14 "
60 "	10 " 14 "
68 "	11 " 14 "
76 "	12 " 14 "
84 "	13 " 14 "
92 "	14 " 16 "
100 "	15 " 16 "
110 "	16 " 16 "
120 "	17 " 16 "
130 "	18 " 16 "
144 "	19 " 18 "
156 "	20 " 18 "
168 "	21 " 20 "
180 "	22 " 20 "
192 "	24 " 21 "

Couplings and Tube extra when furnished.

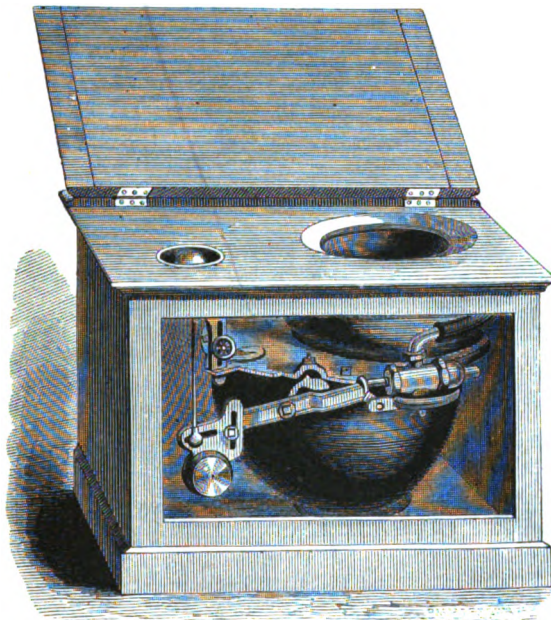
A. CARR, MANUFACTURER, NEW YORK.

WATER CLOSETS.

COMPLETE, IN BLACK WALNUT CASE.

CARR'S PATENT.

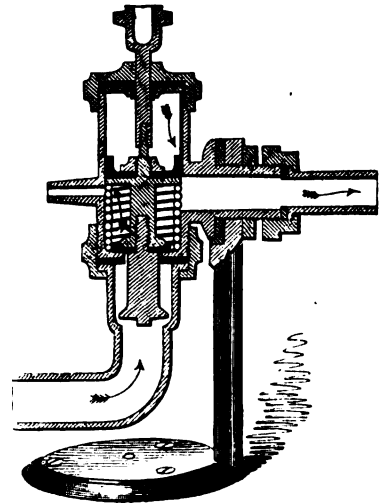
Fig. 403.



DOUBLE ACTION VALVE.

CARR'S PATENT.

Fig. 404.

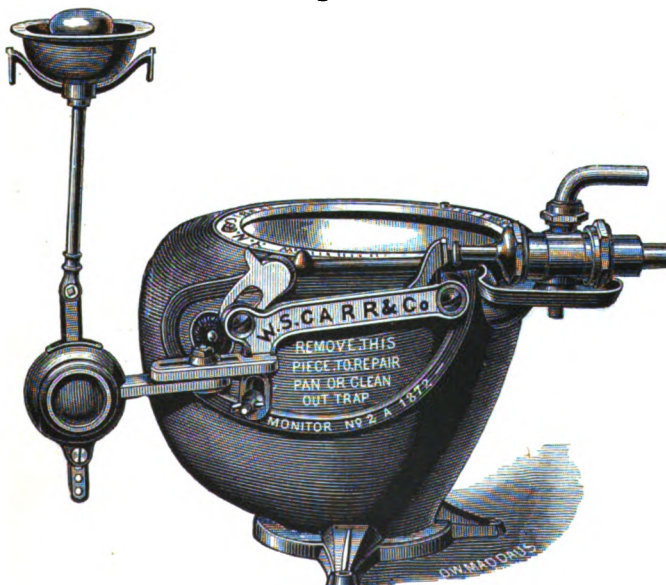


Sectional View.

MONITOR VALVE CLOSET.

CARR'S PATENT.

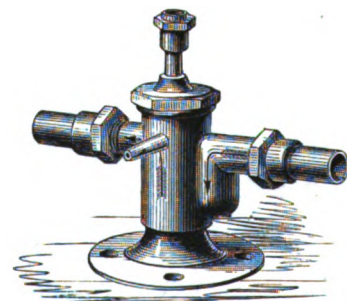
Fig. 405.



SINGLE ACTION VALVE.

CARR'S PATENT.

Fig. 406.



WATER CLOSETS.

No. 2 A PAN WATER CLOSET.

CARR'S PATENT.

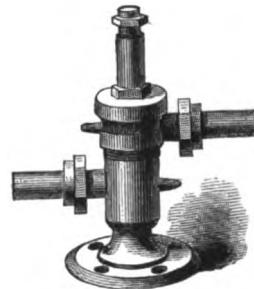
Fig. 407.



With Self-Acting Supply Valve.

WATER WASTE PREVENTER VALVE.

Fig. 408.

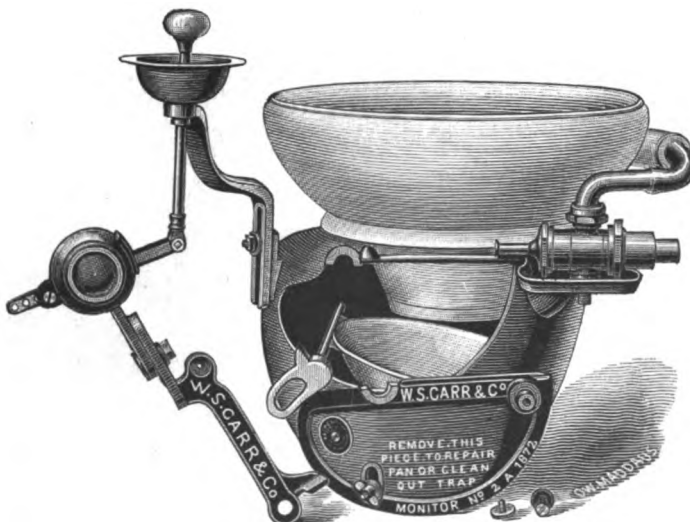


Runs when relieved of weight.

VALVE CLOSET.

CARR'S PATENT.

Fig. 409.



Sectional View.

BASIN JOINT.

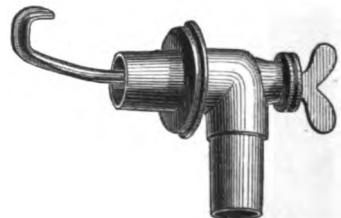


Fig. 410.

A. CARR, MANUFACTURER, NEW YORK.

WATER CLOSETS.

BARTHOLEMEW'S PATENT.

Fig. 411.



BARTHOLEMEW'S DOUBLE VALVE.

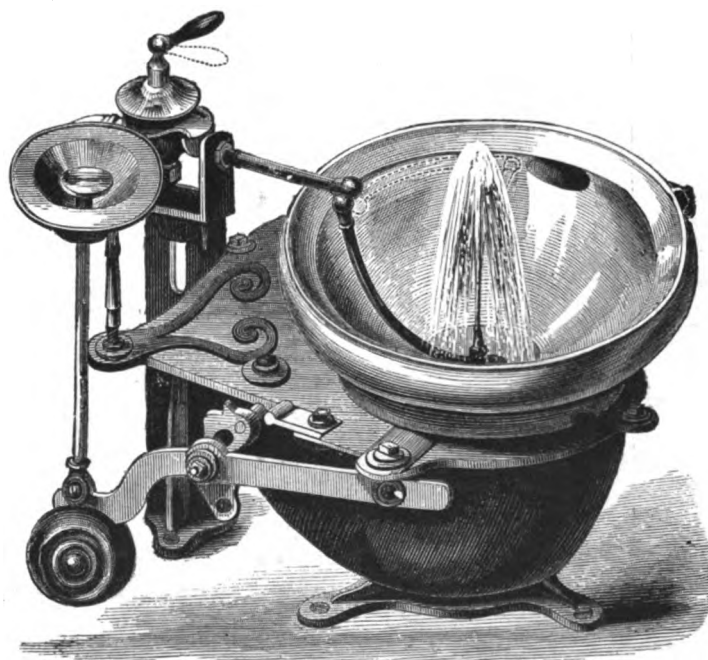
Fig. 412.



Runs when relieved of weight

CRAGIE'S PATENT.

Fig. 413.

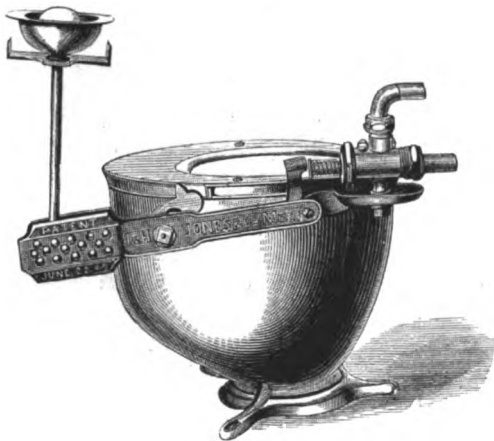


With Bidet Attachment.

WATER CLOSETS.

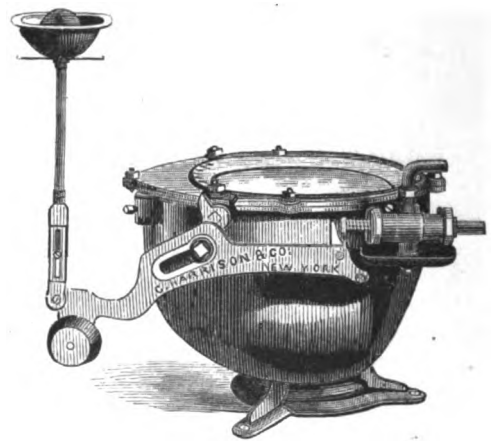
EMPIRE CLOSET.

Fig. 414.



EUREKA CLOSET.

Fig. 415.

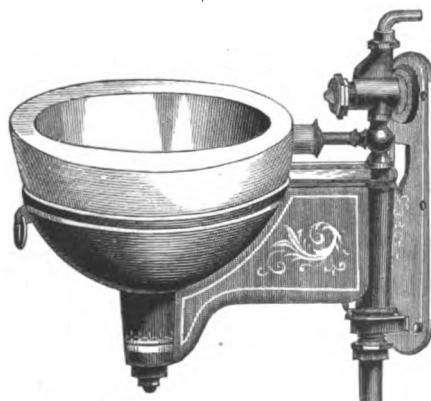


SWINGING URINAL.

WITH WHITE OR FANCY BOWL.

CARR'S PATENT.

Fig. 416.



Large Swing, 21 ins. Small Swing, 16 ins.

A. CARR, MANUFACTURER, NEW YORK.

No. 3 HOPPER STAND,

WITH 9 OR 10 VALVE ATTACHED.

Fig. 421.



To receive any kind of Closet Basin.

No. 4 HOPPER CLOSET,

WITH 9 OR 10 VALVE ATTACHED.

Fig. 422.



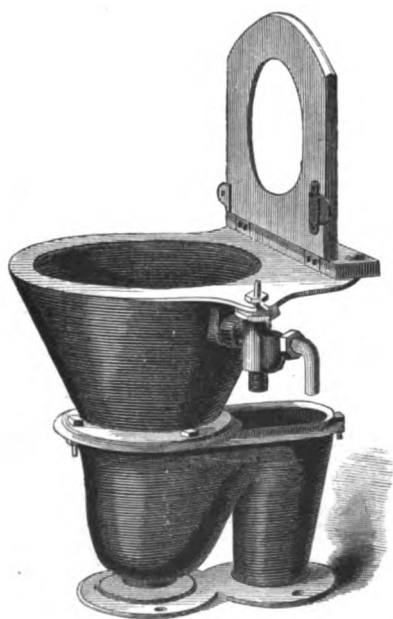
Height, 17 inches.

No. 5 HOPPER AND TRAP

COMBINED.

WITH SELF-RAISING SEAT AND No. 9, 10,
OR 11 VALVE ATTACHED.

Fig. 423.



Height, 17 inches.

No. 6 HOPPER CLOSET,

WITH SELF-RAISING SEAT AND
No. 9, 10, OR 11 VALVE
ATTACHED.

Fig. 424.

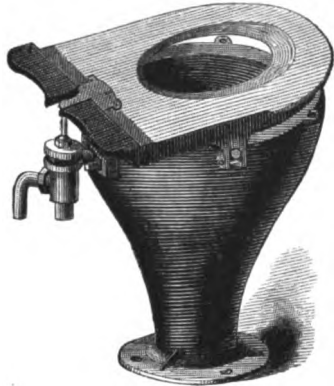


Height, 17 inches.

WATER CLOSETS.

HOSPITAL HOPPER CLOSET.

Fig. 425.



With 9, 10, and 11 Valve attached.
Height, 17 inches.

PHILADELPHIA PATTERN HOPPER.

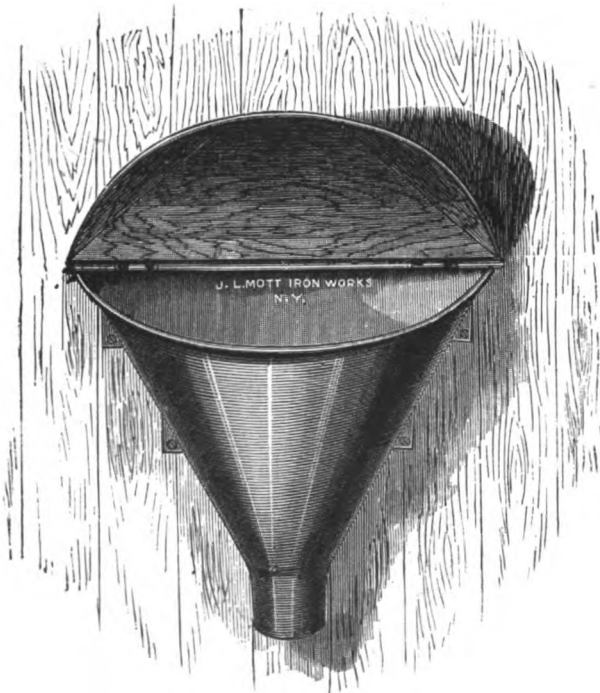
Fig. 426.



Height, 16 inches. 4 inch outlet.

NEW PATTERN SLOP HOPPER.

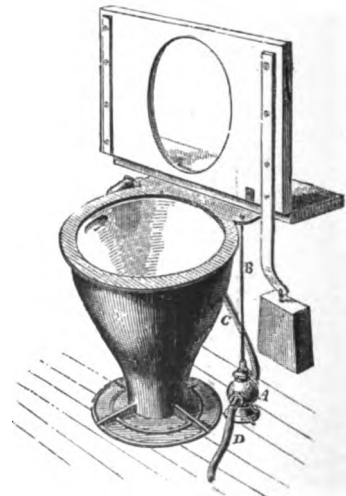
Fig. 427.



ENAMELED HOPPER AND TRAP COMBINED.

BARTHOLEMEW'S PATENT.

Fig. 428.



With Self-Raising Seat.

MARBLE SLABS, ITALIAN AND AMERICAN.

COUNTERSUNK AND PLAIN.

When ordering give the exact size; if with back or sides, give the height required, give the size of opening for Basin, and state whether wanted for one or two Cocks.

Fig. 430.

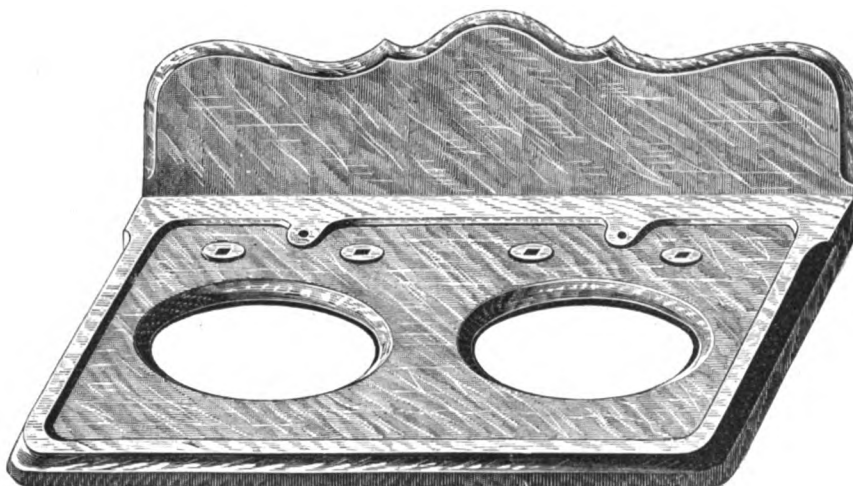


Fig. 431.

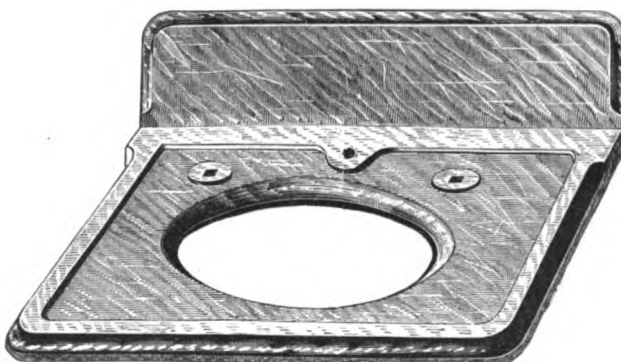
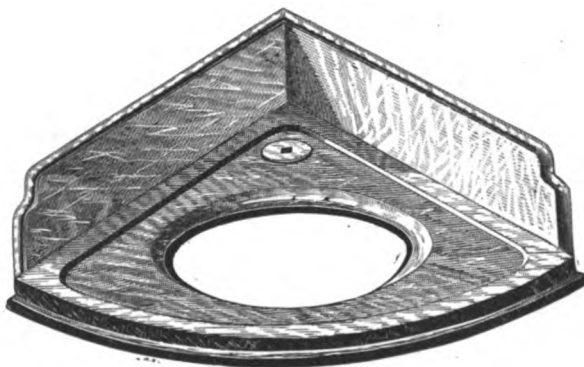


Fig. 432.



EARTHENWARE SLABS AND BASINS COMBINED.

CORNER SLAB, MARBLED.

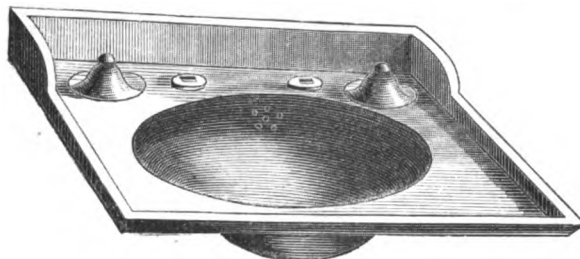
Fig. 433.



Size, 19 by 19 inches. Size of Basin, 11 inches inside.

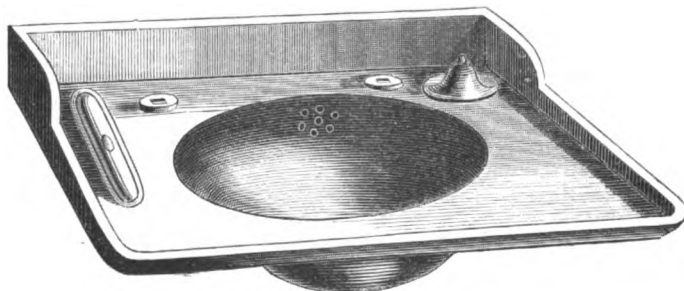
SQUARE SLABS, MARBLED.

Fig. 434.



Size, 18 by 18 inches. Size of Basin, 11 inches inside.

Fig. 435.



Size, 17 by 24 inches. Size of Basin, 12 inches inside.

When ordering the above, always state whether Common Overflow, Patent Overflow, or Rubber Plug is wanted, and if with one or two holes for cocks.

SOAP CUPS & BRUSH TRAYS, MARBLED & WHITE.

Fig. 436.



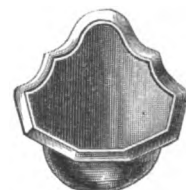
Fig. 437.



Fig. 438.



Fig. 438.



These can be decorated to match all Fancy Basins

PLUMBER'S EARTHENWARE.

WASH BASINS. WHITE, MARBLED, AND FANCY COLORS.

Fig. 439.



Common Overflow. All sizes from 9 to 20 inches, outside measure.

Fig. 440.



Patent Overflow. All sizes from 12 to 16 inches, outside measure.

MARBLED WASH BASIN.

Fig. 441.



Patent Overflow and Rubber Plug. All sizes from 12 to 16 inches, outside measure.

CLOSET BASINS.

WHITE, MARBLED, AND BLUE.

Fig. 441t.



French Pattern.

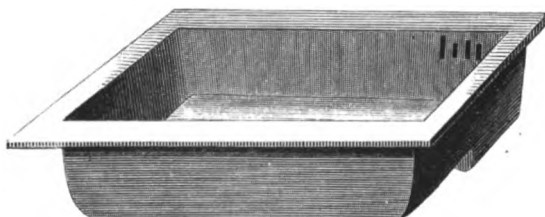
Fig. 442.



Oval Pattern.

EARTHEN SINK.

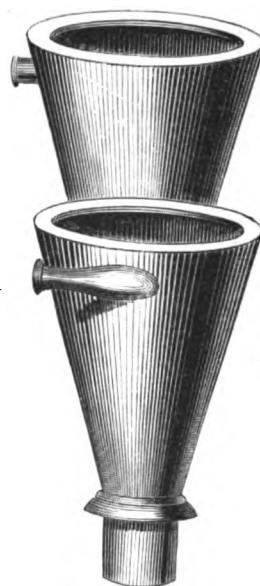
Fig. 443.



White, all sizes, from 12 x 20 to 17 x 25 inches.

EARTHEN HOPPERS.

Fig. 444.



With Straight or Side Arm, 4 inch opening.

EARTHEN SLOP HOPPER.

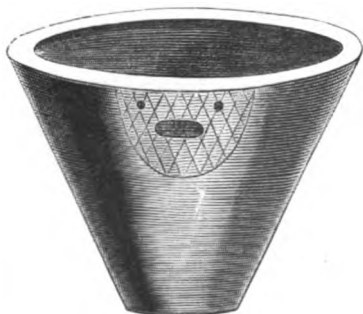
Fig. 445.



With Strainer 3 and 4 inch opening. Large size, 20 inches.
Small size, 16 inches.

SHIP CLOSET BASINS.

Fig. 446.



New Pattern.

White 13 inches diameter outside.
Sizes, 3, 3½, 4, 4½ inch opening.

Fig. 447.

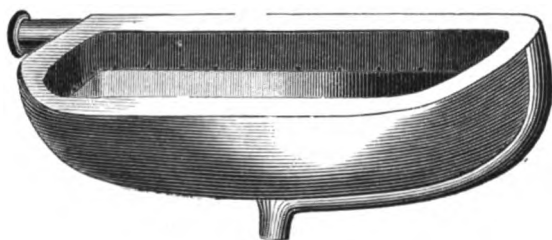


Old Pattern.

White, 13 inches diameter outside.
Sizes, 3, 3½, 4, 4½ inch opening.

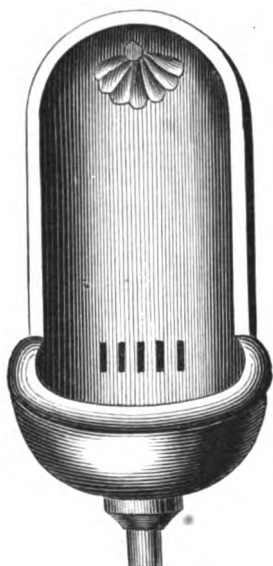
URINALS.

Fig. 448.



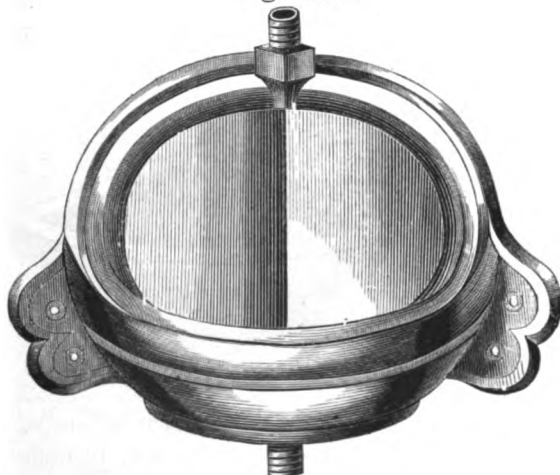
Oblong, Pierced Pipe and Strainer, Patent Overflow.
Large size, 10x18, Small size, 9x15 inches.

Fig. 450.



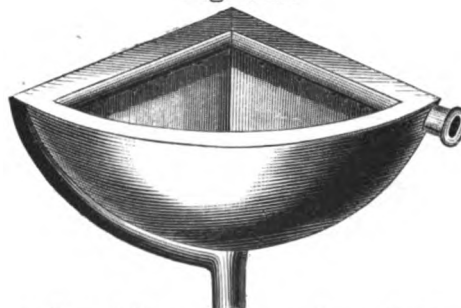
Cradle for Recess.
Large size, 14x22, Small size, 12x19 inches.

Fig. 452.



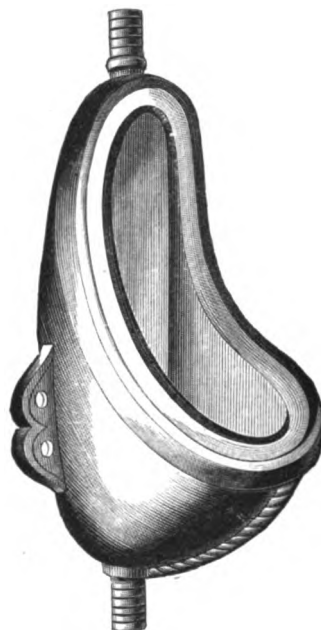
Bedfordshire, for Corner, Patent Overflow. Large size, 12½x16½, Small size, 10x16 inches.

Fig. 449.



Corner, Pierced Pipe and Strainer, Patent Overflow.
Large size, 12, Small size, 10 inches.

Fig. 451.



Bedfordshire Flat Back. Patent Overflow.
Large size, 15½x18½, Small size, 12½x16½ inches.

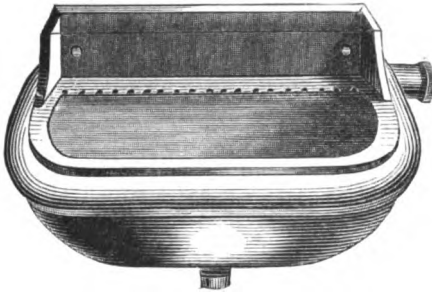
Fig. 453.



Round Pierced Pipe and Strainer.

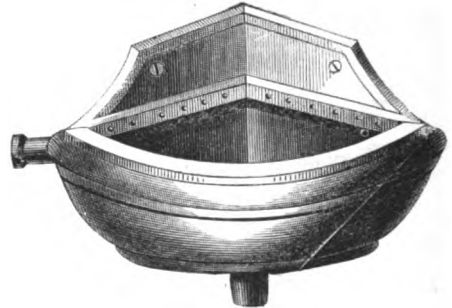
URINALS.

Fig. 454.



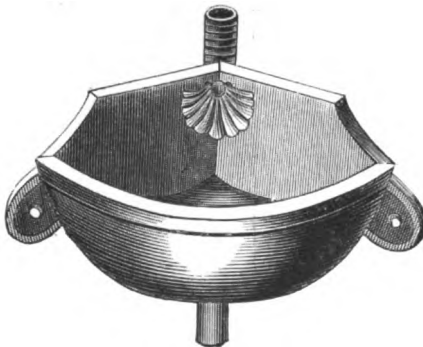
Oblong, Pierced Pipe and Strainer, Patent Overflow.
Large size, 9x15, Small size, 8x12 inches.

Fig. 455.



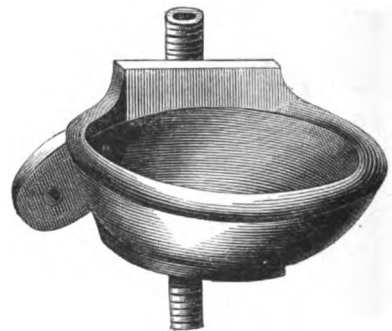
Corner, Pierced Pipe and Strainer, Patent Overflow.
Large size, 12, Small size, 10 inches.

Fig. 456.



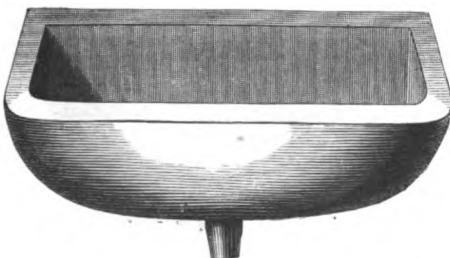
Corner, Cane Color Outside, White Inside,
no Overflow. Size 10 inches.

Fig. 457.



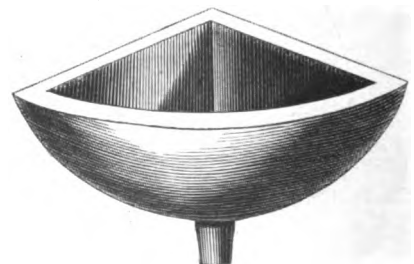
Oblong, Cane Color Outside, White Inside,
no Overflow. Size 9x12 inches.

Fig. 458.



Oblong with Strainer, but no Supply.
Large size, 10x18, Small size 9x15 inches.

Fig. 459.



Corner with Strainer, but no Supply.
Large size, 12, Small size, 10 inches.

BRASS PROOF PUMP,

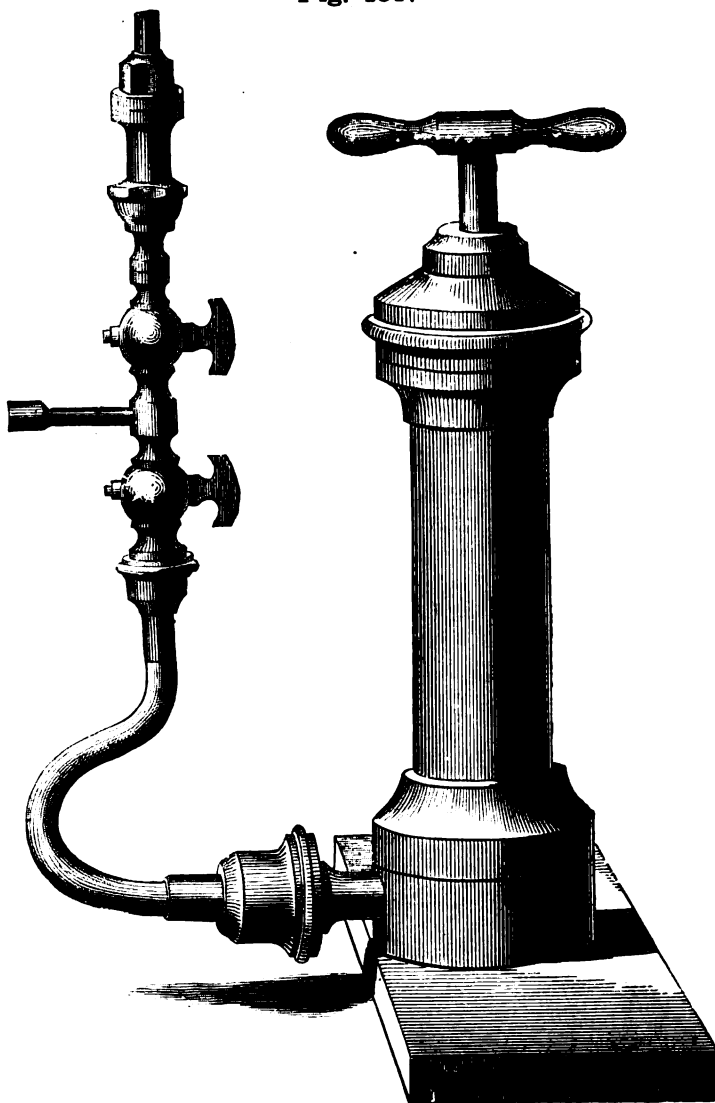
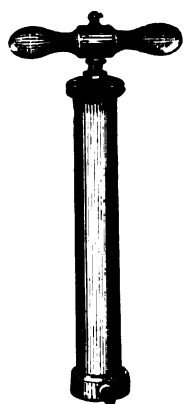
FOR GAS FITTERS' USE.

Fig. 461.

TESTING PUMP,

FOR GAS FITTERS' USE.

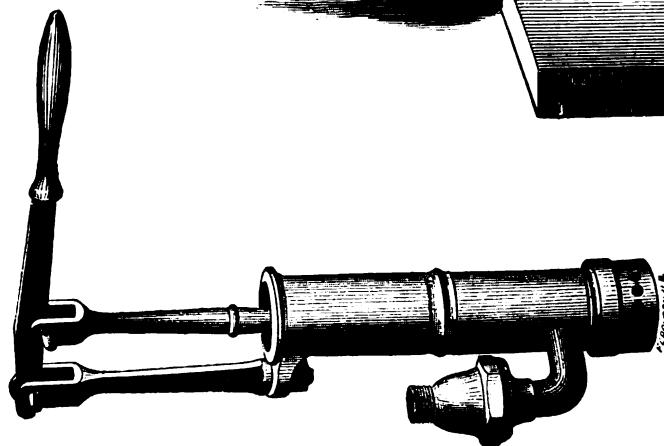
Fig. 460.



FORCE OR PRESSURE PUMP,

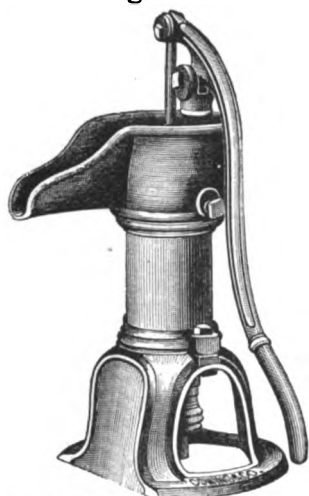
FOR PLUMBERS FOR CLEARING OBSTRUCTED PIPES.

Fig. 462.



**PATENT PITCHER SPOUT PUMP,
FOR THE AMERICAN DRIVEN WELL.**

Fig. 463.

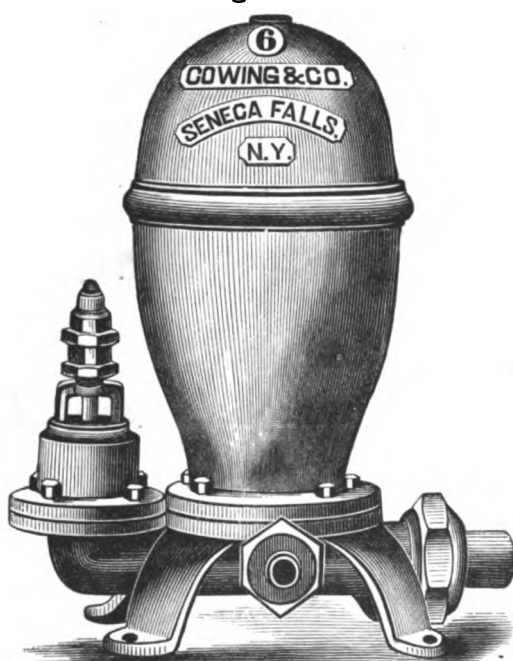


No. 1, 3 inches Calibre, suitable for Pipe 1½ inches Calibre.
 " 2, 3½ " " " " 1½ " "
 " 3, 4 " " " " 1½ " "
 " 4, 4½ " " " " 1½ " "

IMPROVED HYDRAULIC RAM,

FOR SUPPLYING DWELLINGS, ETC., WITH RUNNING WATER.

Fig. 465.

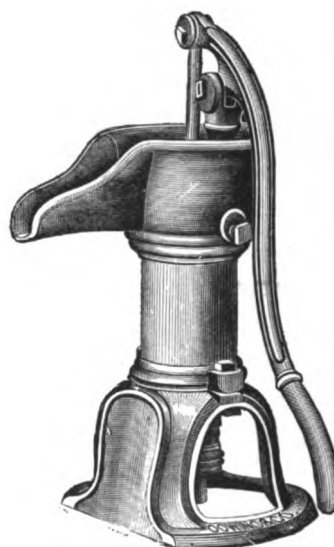


We make six sizes, fitted for attaching Lead or Wrought Iron Pipes, as follows:

Size of Ram.	Calibre of Drive Pipe.	Calibre of Discharge Pipe.	Length of Drive Pipe.	Length of Discharge Pipe.
2	¾ inch.	¾ inch.	40 to 50 feet.	To where desired.
3	1 " "	¾ " "	40 to 50 " "	
4	1½ " "	¾ " "	40 to 50 " "	
5	2 " "	¾ " "	40 to 50 " "	
6	2½ " "	1 " "	40 to 60 " "	
7	4 " "	2 " "	50 to 80 " "	

**PATENT SAND PUMP,
FOR CLEARING NEW WELLS.**

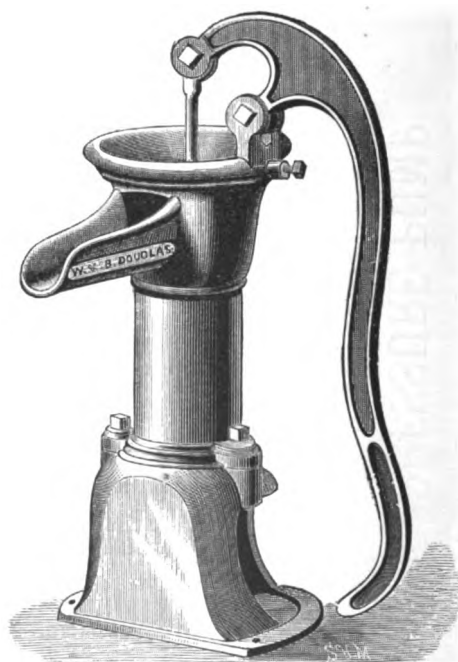
Fig. 464.



Designed for the use of professional well drivers in clearing new wells.
 4½ inches Calibre, suitable for Pipe 1½ inches Calibre.

**BOLT FASTENED, PATENT PITCHER,
SPOUT PUMP.**

Fig. 466.

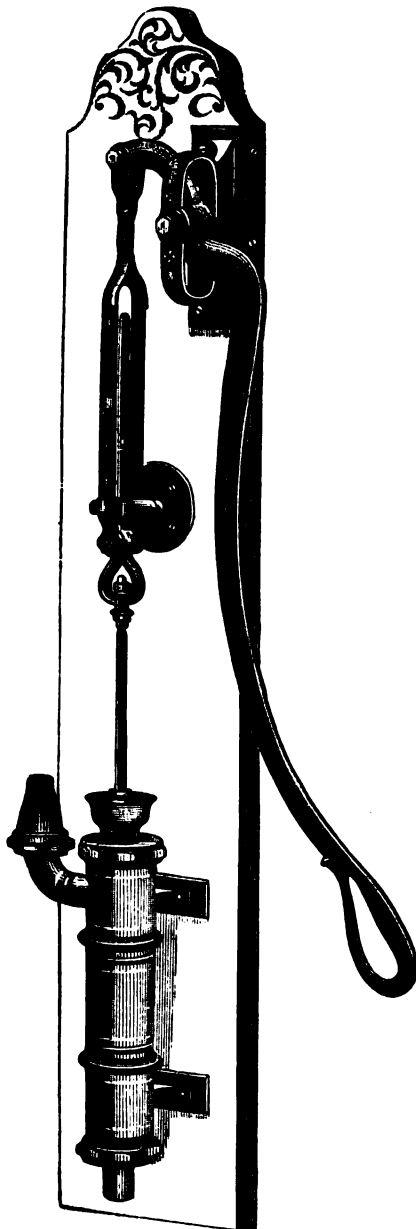


No. 1, 2½ inch bore, suitable for ¾ or 1 inch Pipes.
 " 2, 3 " " " 1 " or 1½ " "
 " 3, 3½ " " " 1½ or 1¾ " "
 " 4, 4 " " " 1¾ or 1½ " "

IRON FORCE PUMPS.

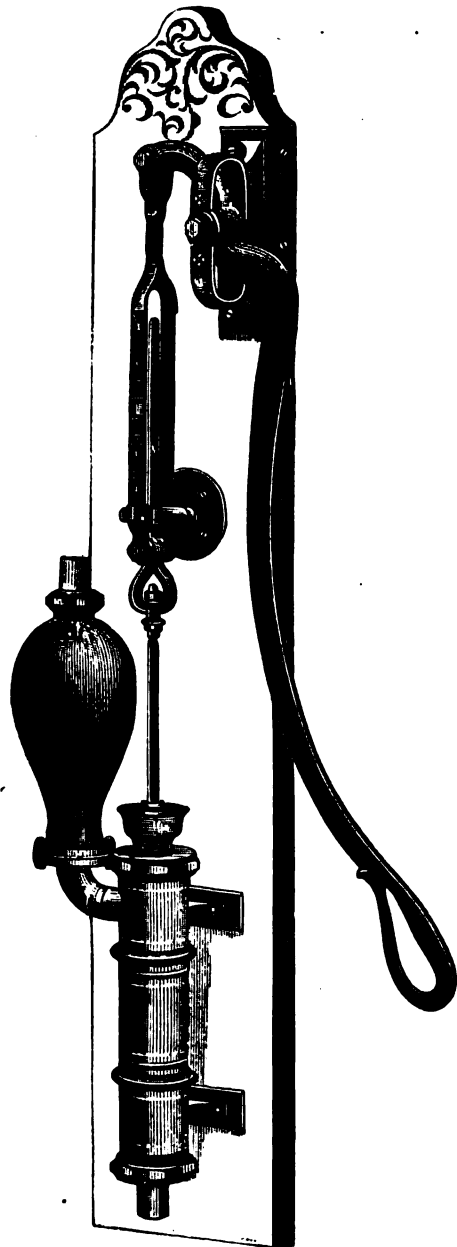
MOUNTED ON PLANK.

No. 135. Fig. 467.



WITH CONNECTING ROD AND GUIDE.

No. 136. Fig. 468.



WITH CONNECTING ROD, GUIDE AND AIR-CHAMBER.

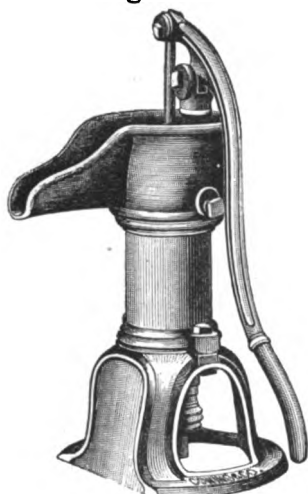
We sell three sizes, right and left handed, fitted for attaching lead or iron pipes, without extra fittings, as follows, viz.:

No. 1,	2 inches	calibre,	suitable	for	pipes	1	and	1½	inch	calibre.
" 2,	2½ "	"	"	"	"	"	"	1½ "	"	"
" 3,	3 "	"	"	"	"	"	"	1½ & 1¾ "	"	"

We sell three sizes, right and left handed, fitted for lead or iron pipes, without extra fittings, as follows, viz.:

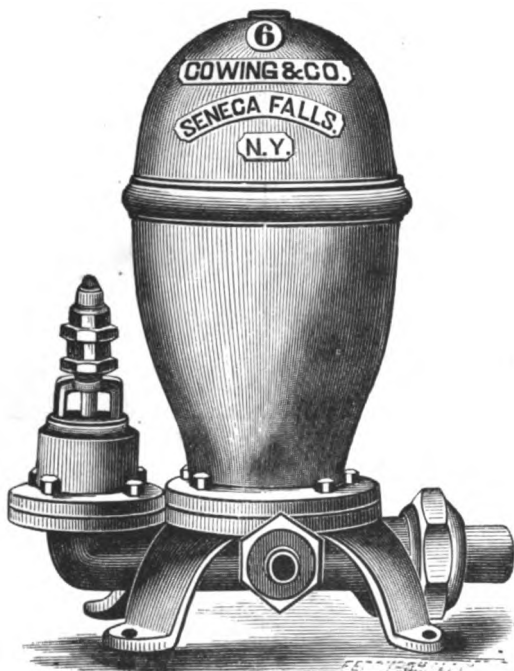
No. 1,	2 inches	calibre,	suitable	for	pipes	1	and	1½	inch	calibre.
" 2,	2½ "	"	"	"	"	"	"	1½ "	"	"
" 3,	3 "	"	"	"	"	"	"	1½ & 1¾ "	"	"

PATENT PITCHER SPOUT PUMP,
FOR THE AMERICAN DRIVEN WELL.
Fig. 463.



No. 1, 3 inches Calibre, suitable for Pipe 1 1/4 inches Calibre.
" 2, 3 1/2 " " " 1 1/2 " "
" 3, 4 " " " 1 3/4 " "
" 4, 4 1/2 " " " 1 3/4 " "

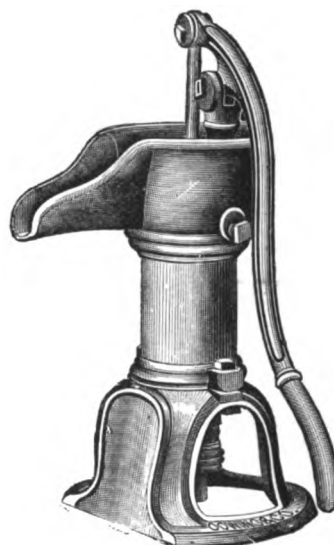
IMPROVED HYDRAULIC RAM,
FOR SUPPLYING DWELLINGS, ETC., WITH RUNNING WATER.
Fig. 465.



We make six sizes, fitted for attaching Lead or Wrought Iron Pipes, as follows:

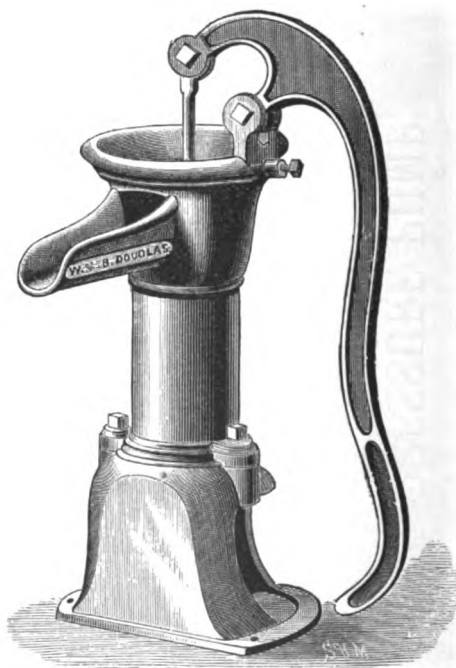
Size of Ram.	Calibre of Drive Pipe.	Calibre of Discharge Pipe.	Length of Drive Pipe.	Length of Discharge Pipe.
2	3/4 inch.	3/4 inch.	40 to 50 feet.	To where desired.
3	1 " "	3/4 " "	40 to 50 " "	
4	1 1/4 " "	3/4 " "	40 to 50 " "	
5	2 " "	1 " "	40 to 60 " "	
6	2 1/2 " "	1 " "	40 to 60 " "	
7	4 " "	2 " "	50 to 80 " "	

PATENT SAND PUMP,
FOR CLEARING NEW WELLS.
Fig. 464.



Designed for the use of professional well drivers in clearing new wells.
4 1/2 inches Calibre, suitable for Pipe 1 1/4 inches Calibre.

BOLT FASTENED, PATENT PITCHER, SPOUT PUMP.
Fig. 466.

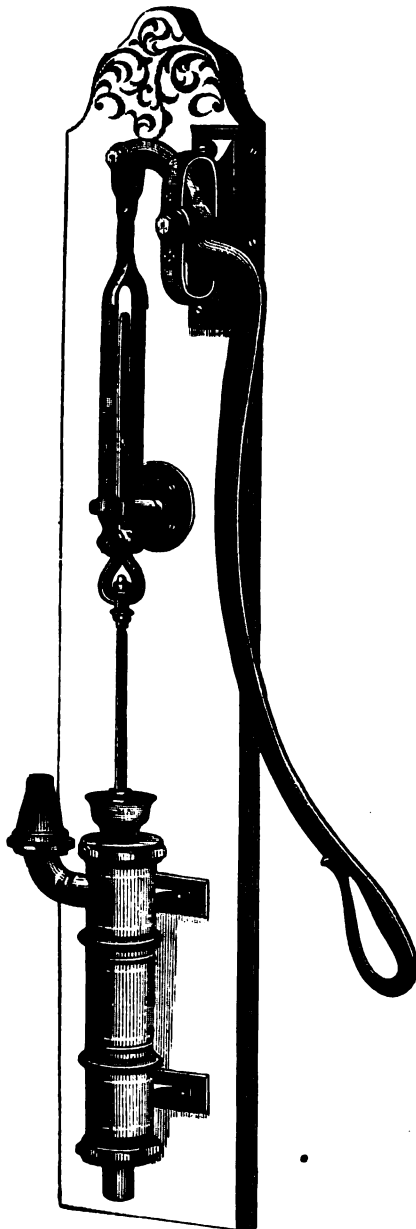


No. 1, 2 1/2 inch bore, suitable for 3/4 or 1 inch Pipes.
" 2, 2 " " 1 or 1 1/4 " "
" 3, 3 1/2 " " 1 1/4 or 1 1/2 " "
" 4, 4 " " 1 1/2 or 1 3/4 " "

IRON FORCE PUMPS.

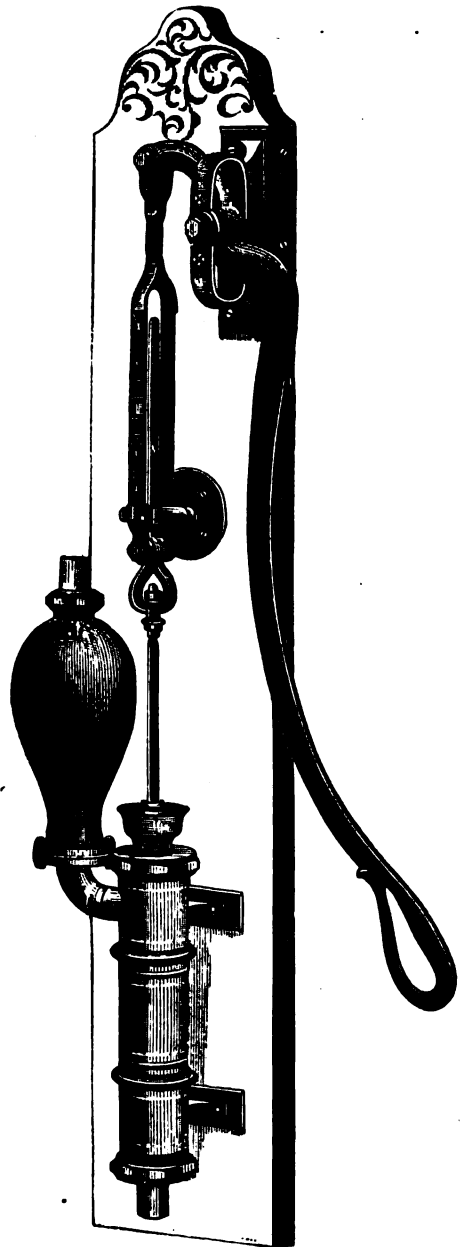
MOUNTED ON PLANK.

No. 135. Fig. 467.



WITH CONNECTING ROD AND GUIDE.

No. 136. Fig. 468.



WITH CONNECTING ROD, GUIDE AND AIR-CHAMBER.

We sell three sizes, right and left handed, fitted for attaching lead or iron pipes, without extra fittings, as follows, viz.:

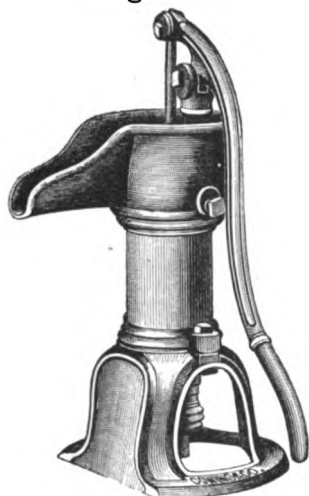
No. 1,	2 inches	calibre,	suitable	for	pipes	1	and	1½	inch	calibre.
"	2, 2½	"	"	"	"	"	"	1½	"	"
"	3, 3	"	"	"	"	"	"	1½ & 1¾	"	"

We sell three sizes, right and left handed, fitted for lead or iron pipes, without extra fittings, as follows, viz.:

No. 1,	2 inches	calibre,	suitable	for	pipes	1	and	1½	inch	calibre.
"	2, 2½	"	"	"	"	"	"	1½	"	"
"	3, 3	"	"	"	"	"	"	1½ & 1¾	"	"

**PATENT PITCHER SPOUT PUMP,
FOR THE AMERICAN DRIVEN WELL.**

Fig. 463.

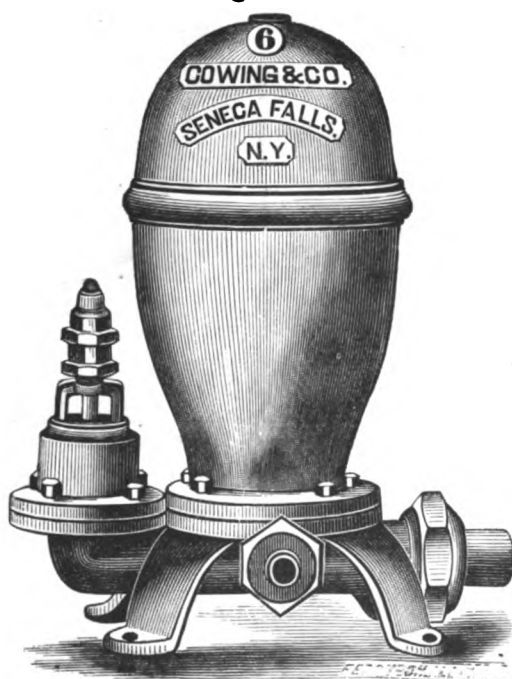


No. 1, 3 inches Calibre, suitable for Pipe 1½ inches Calibre.
 " 2, 3½ " " " 1½ " "
 " 3, 4 " " " 1½ " "
 " 4, 4½ " " " 1½ " "

IMPROVED HYDRAULIC RAM,

FOR SUPPLYING DWELLINGS, ETC., WITH RUNNING WATER.

Fig. 465.



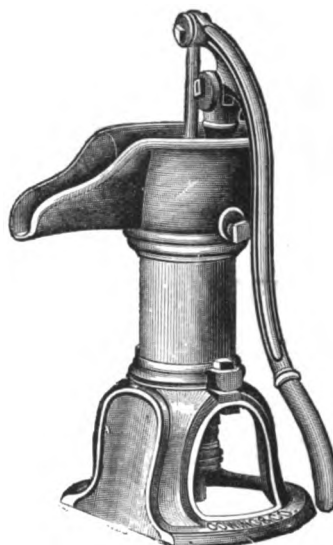
We make six sizes, fitted for attaching Lead or Wrought Iron Pipes, as follows:

Size of Ram.	Calibre of Drive Pipe.	Calibre of Discharge Pipe.	Length of Drive Pipe.	Length of Discharge Pipe.
2	¾ inch.	¾ inch.	40 to 50 feet.	
3	1 " "	¾ " "	40 to 50 " "	
4	1½ " "	¾ " "	40 to 50 " "	
5	2 " "	¾ " "	40 to 50 " "	
6	2½ " "	1 " "	40 to 60 " "	
7	4 " "	2 " "	50 to 80 " "	

To where desired.

**PATENT SAND PUMP,
FOR CLEARING NEW WELLS.**

Fig. 464.



Designed for the use of professional well drivers in clearing new wells.
 4½ inches Calibre, suitable for Pipe 1½ inches Calibre.

**BOLT FASTENED, PATENT PITCHER,
SPOUT PUMP.**

Fig. 466.

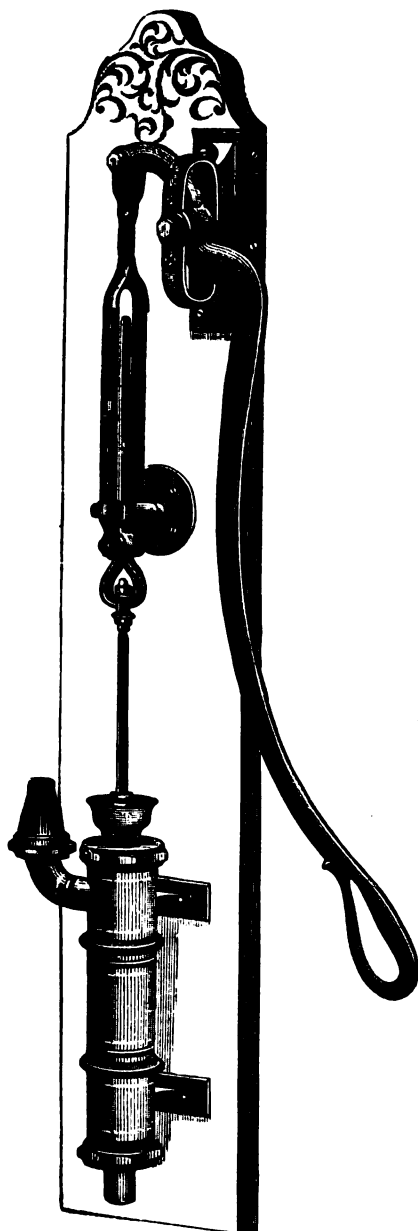


No. 1, 2½ inch bore, suitable for ¾ or 1 inch Pipes.
 " 2, 2 " " 1 " or 1½ " "
 " 3, 3½ " " 1½ or 1¾ " "
 " 4, 4 " " 1¾ or 1½ " "

IRON FORCE PUMPS.

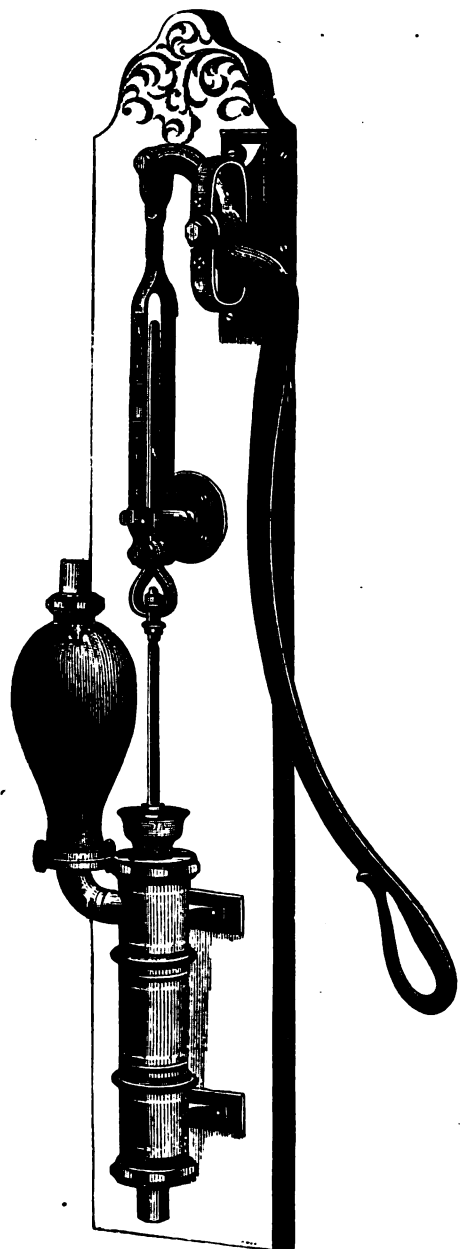
MOUNTED ON PLANK.

No. 135. Fig. 467.



WITH CONNECTING ROD AND GUIDE.

No. 136. Fig. 468.



WITH CONNECTING ROD, GUIDE AND AIR-CHAMBER.

We sell three sizes, right and left handed, fitted for attaching lead or iron pipes, without extra fittings, as follows, viz.:

No. 1,	2 inches	calibre,	suitable	for	pipes	1	and	1½	inch	calibre.
" 2,	2½ "	"	"	"	"	1½	"	"	"	"
" 3,	3 "	"	"	"	"	1½	&	1½	"	"

We sell three sizes, right and left handed, fitted for lead or iron pipes, without extra fittings, as follows, viz.:

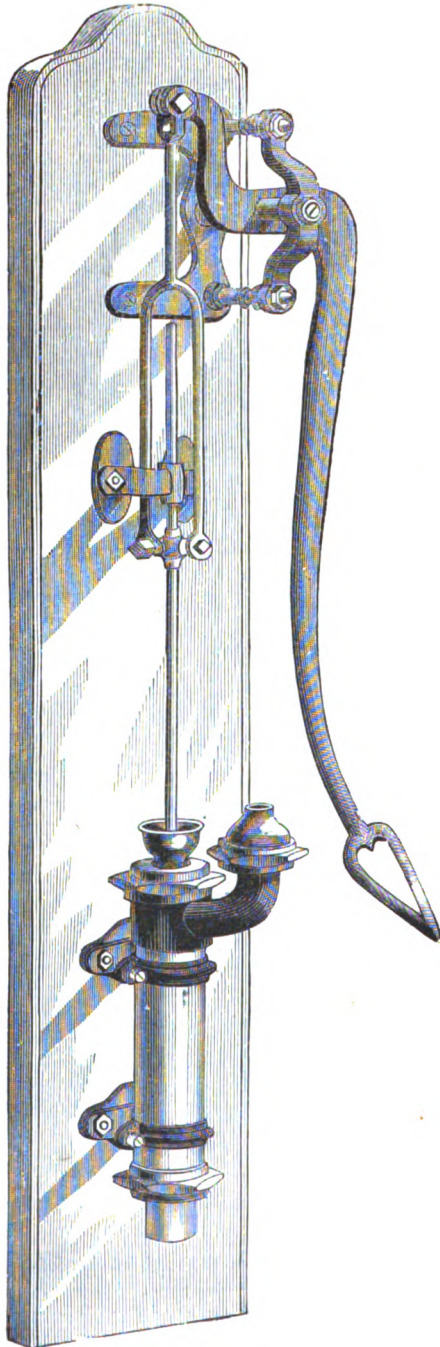
No. 1,	2 inches	calibre,	suitable	for	pipes	1	and	1½	inch	calibre.
" 2,	2½ "	"	"	"	"	1½	"	"	"	"
" 3,	3 "	"	"	"	"	1½	&	1½	"	"

SUCTION AND FORCE PUMPS.

BRASS PATENT SWIVEL CYLINDER.

MOUNTED ON PLANK.

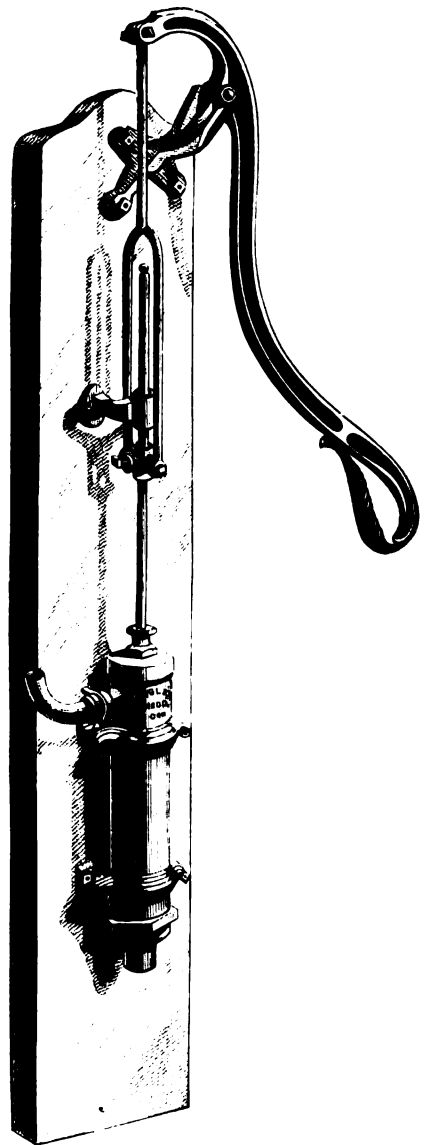
Fig. 469.



BRASS, EXTRA FINISHED, IMPROVED.

MOUNTED ON PLANK.

Fig. 470.



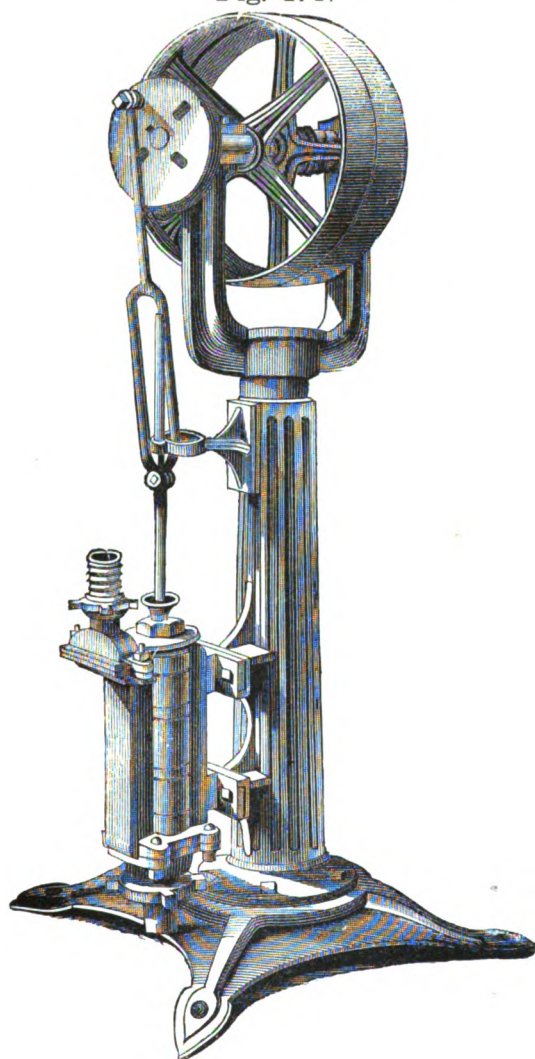
A. CARR, MANUFACTURER, NEW YORK.

DOUBLE-ACTING SUCTION AND FORCE PUMPS.

ONE A.

Mounted on Iron Stand, with Pulleys for power.

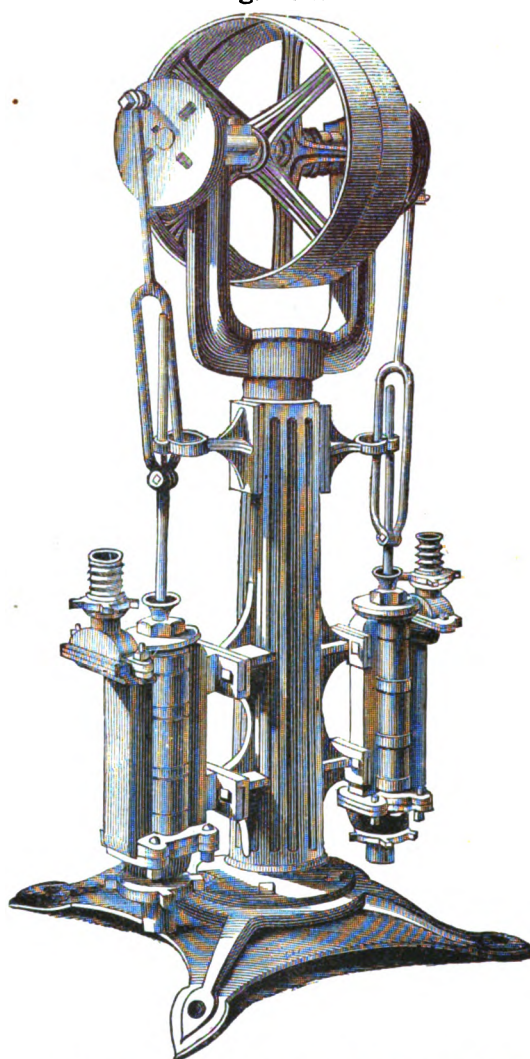
Fig. 471.



TWO A.

Iron Stand and Pulleys for power, equal to 4 single-acting pumps.

Fig. 472.

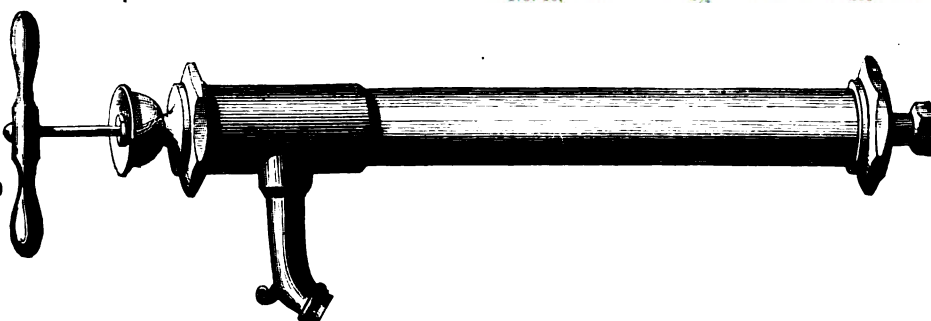


No. 1, suitable for	1	inch pipe, raises 16 gallons per min.
No. 2, " "	1 or 1½	" " " 24 " "
No. 3, " "	1½	" " " 30 " "
No. 4, " "	1½	" " " 44 " "
No. 5, " "	1½	" " " 52 " "
No. 6, " "	2	" " " 60 " "
No. 7, " "	2	" " " 80 " "
No. 10, " "	2½	" " " 100 " "

No. 1, suitable for	1	inch pipe, raises 32 gallons per min.
No. 2, " "	1 or 1½	" " " 48 " "
No. 3, " "	1½	" " " 60 " "
No. 4, " "	1½	" " " 88 " "
No. 5, " "	1½	" " " 104 " "
No. 6, " "	2	" " " 120 " "
No. 8, " "	2	" " " 160 " "
No. 10, " "	2½	" " " 200 " "

BRASS DRIP PUMP.

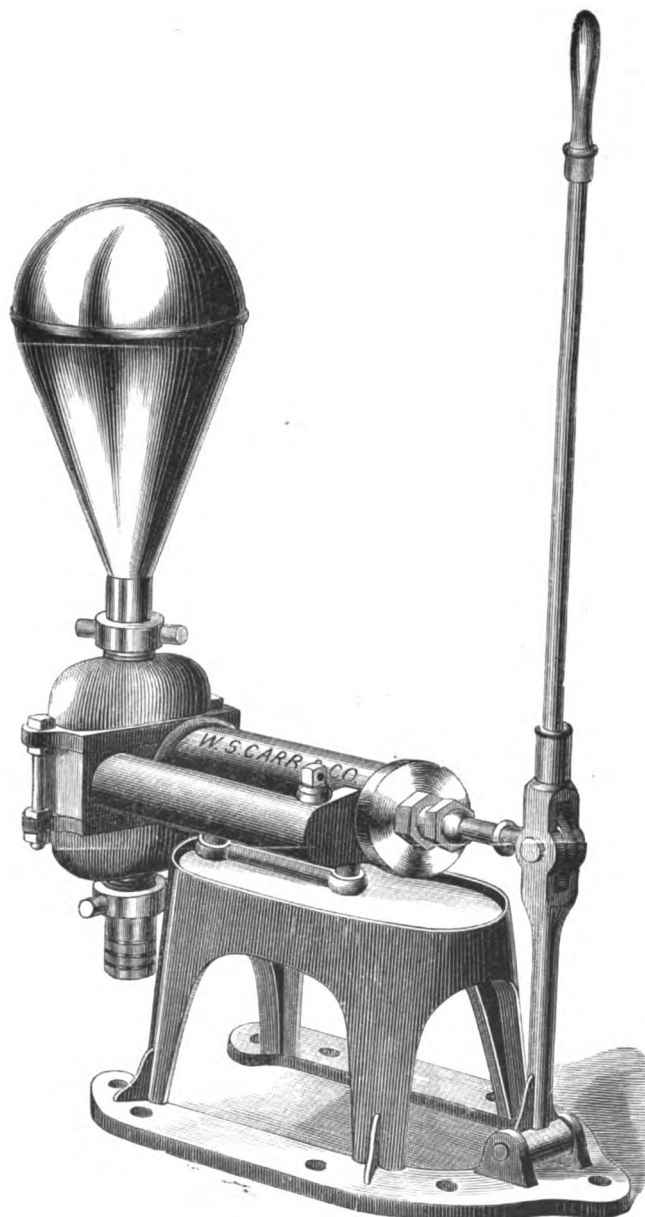
Fig. 473.



Designed for the use of Gas Companies and Plumbers. The coupling at bottom can be furnished for ¾ or 1 inch iron pipe.

DOUBLE-ACTING MONITOR HOUSE & SHIP PUMP, ON FRAME FOR HAND OR STEAM POWER.

Fig. 474.



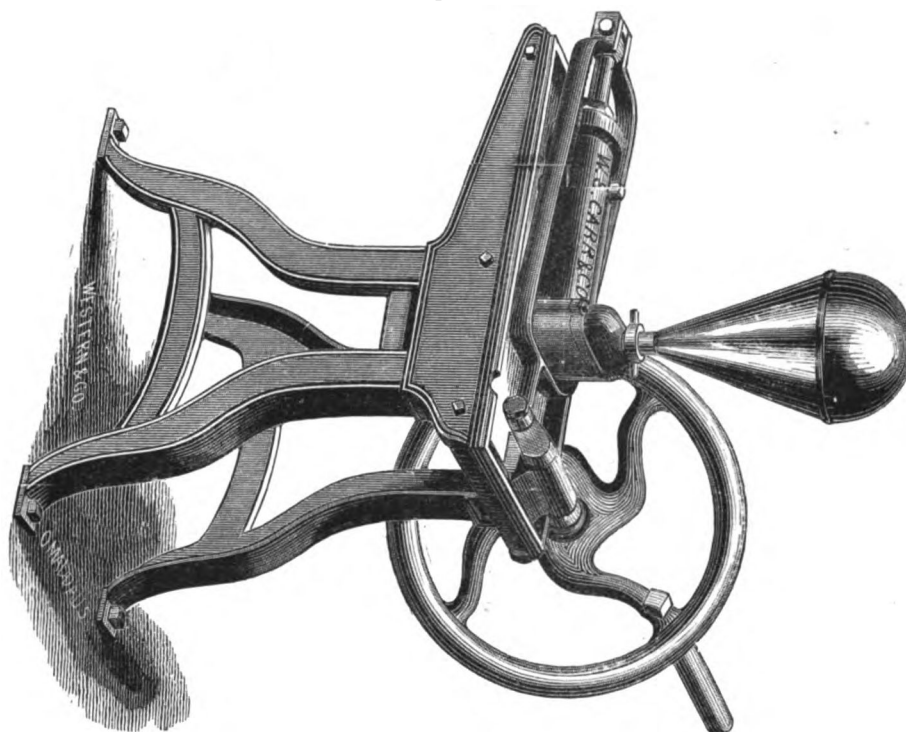
No. 5, 2 inch Cylinder.
No. 6, 2½ " "

No. 7, 3 inch Cylinder.
No. 8, 4 " "

A. CARR, MANUFACTURER, NEW YORK.

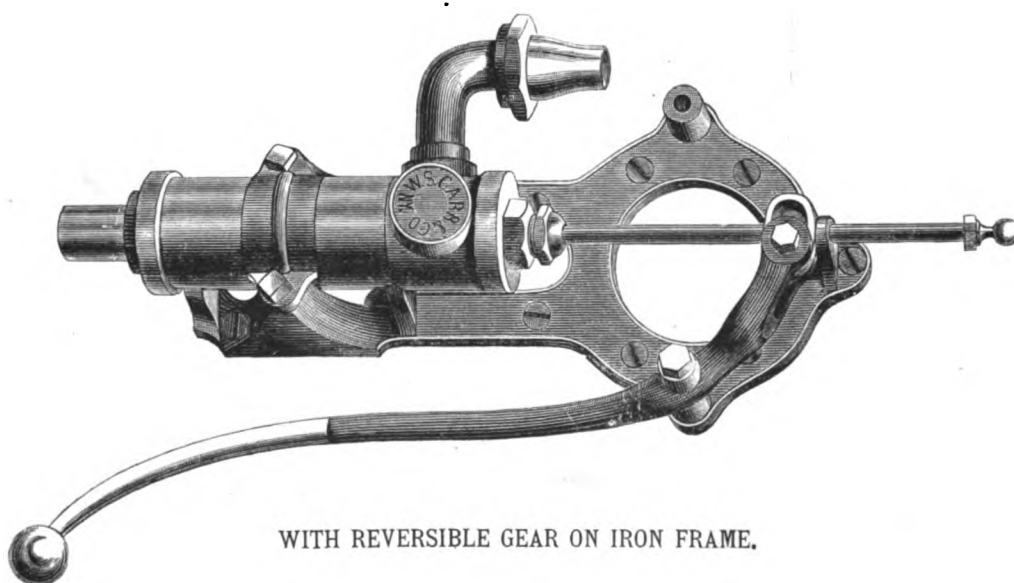
DOUBLE ACTING MONITOR HOUSE & SHIP PUMP, ON FRAME FOR HANDLE OR STEAM POWER.

Fig. 475.



SINGLE ACTION LIFT AND FORCE PUMP,

Fig. 476.



WITH REVERSIBLE GEAR ON IRON FRAME.

No. 10, 2 inch with Spout.
" 11, 2 " Rising Valve, short chamber.

No. 12, 2 inch Rising Valve, long chamber.
" 13, 2 " " " " "

CAST IRON WASH STANDS.

We have always on hand a large selection of frames in imitation of Sienna and Egyptian Marble (light and dark), with Bronzed or other mouldings. Aberdeen Granites, Oak and Black Walnut, Bird's Eye Maple, &c.
In the process of marbling, the frame is subjected to a high degree of heat, which gives it a bright, smooth and hard surface, so that it cannot be stained, and making it entirely impervious to the action of the water.

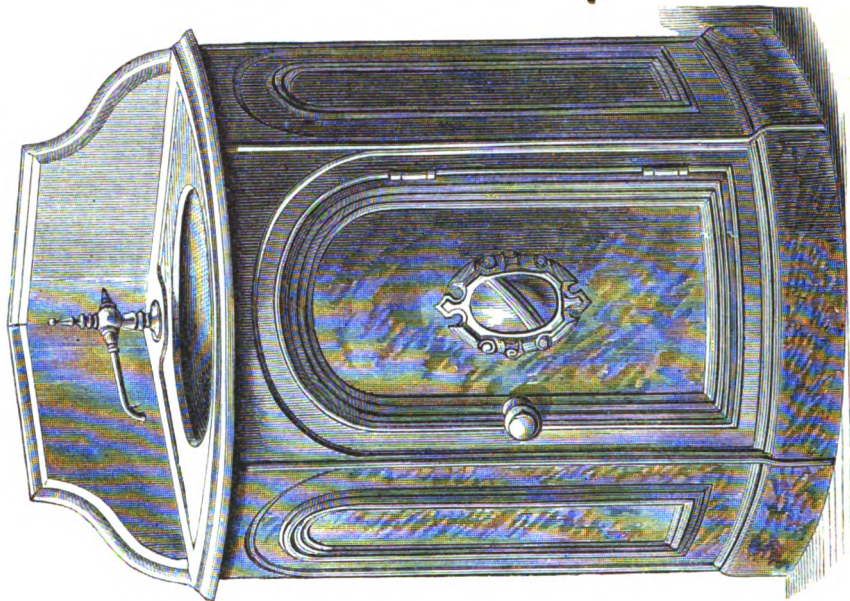
MOTT'S PATENT CORNER WASH STAND.

WITH OVERFLOW.

NEW PATTERN, 1867

No. 43

Fig. 478.



Length across front, 36 inches. Width on sides, 17½ inches. Height 28 inches.

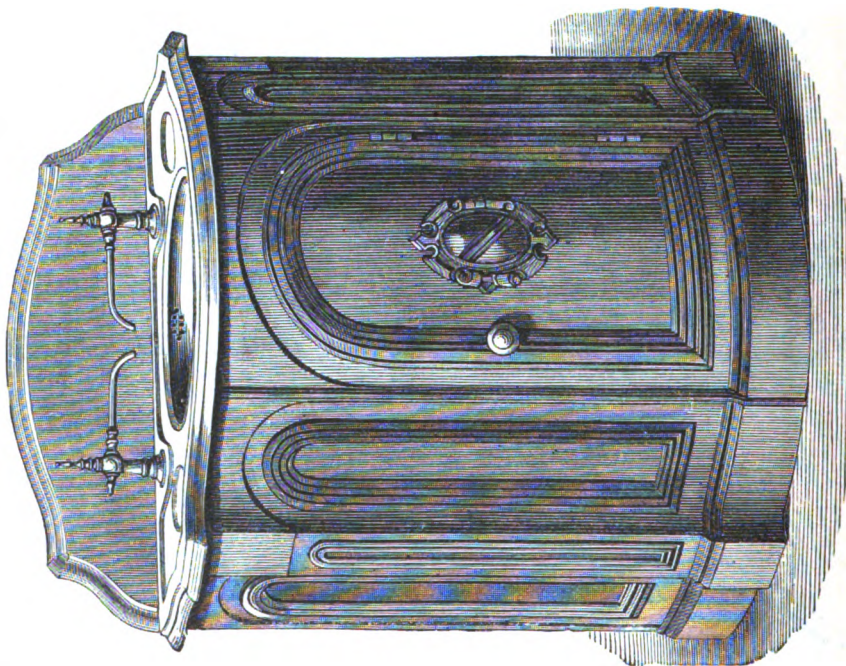
MOTT'S PATENT HALF CIRCLE WASH STAND.

WITH OVERFLOW.

NEW PATTERN, 1867.

No. 42.

Fig. 477.



Length on back, 30 inches. Depth through center, 16 inches. Height, 28 inches.

PLAIN, PAINTED, GALVANIZED, ENAMELED AND MARBLEIZED.

When ordering, please state if for Hot or Cold Water, or both, and if brass plug is wanted. The common basin plug can be used with these patterns.

A. CARR, MANUFACTURER, NEW YORK.

CAST IRON WASH STANDS.

MOTT'S CORNER WASH STAND.

MOTT'S HALF-CIRCLE WASH STAND.

MOTT'S HALF-CIRCLE WASH STAND.

ON STANDARD.

ON STANDARD.

WITH OVERFLOW.
(New Design.)

ON STANDARD.

No. 45.

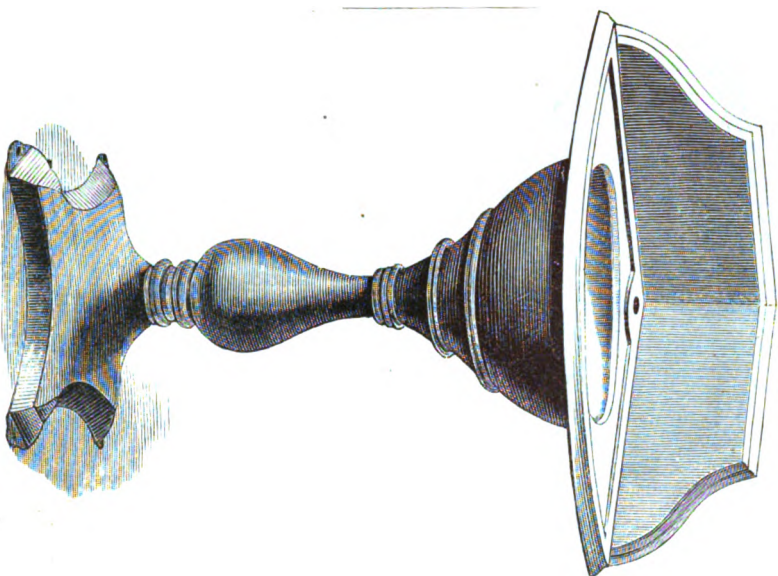
Fig. 479.

No. 44.

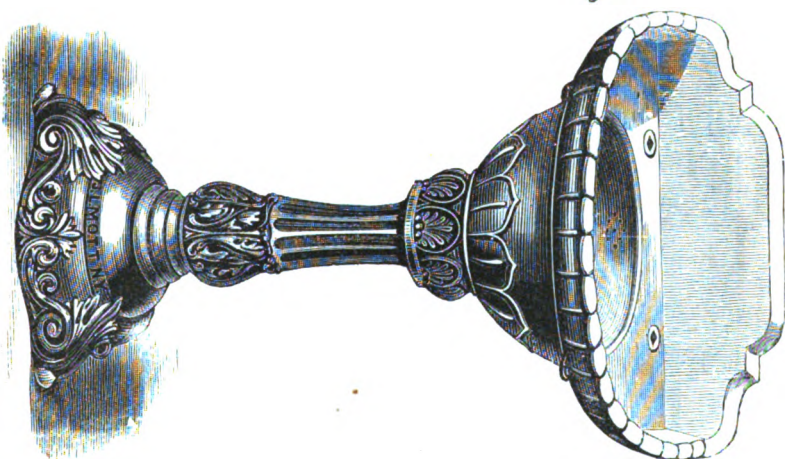
Fig. 480.

No. 44.

Fig. 481.

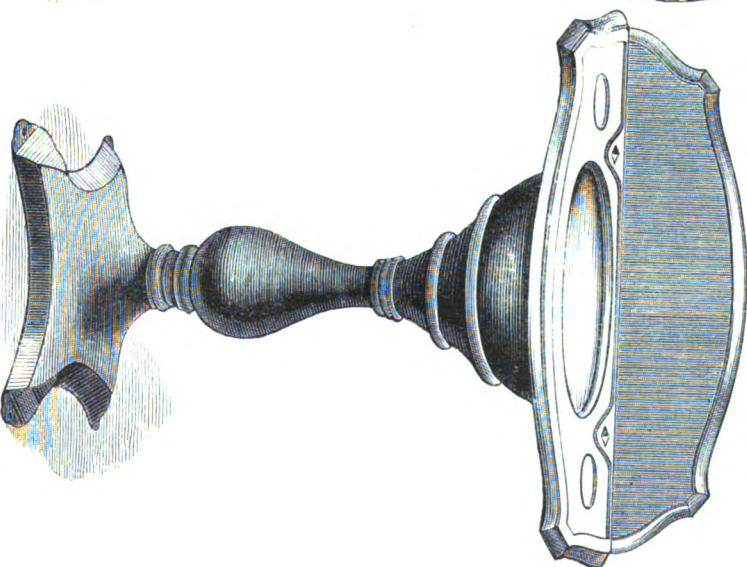


Height to front of Slab, 36 1/2 inches. Height to top of Back, 38 inches. Length on side, 18 inches. Diameter of Bowl, 13 inches. When ordering, please state if for hot or cold water, or both, and if brass plug is wanted. The common basin plug can be used with this pattern.



Height to front of Slab, 39 inches. Height to top of Back, 39 1/2 inches. Length of Back, 23 inches. Width of Bowl, 12 inches.

PLAIN, PAINTED, GALVANIZED, OR ENAMELED SLAB AND BOWL.



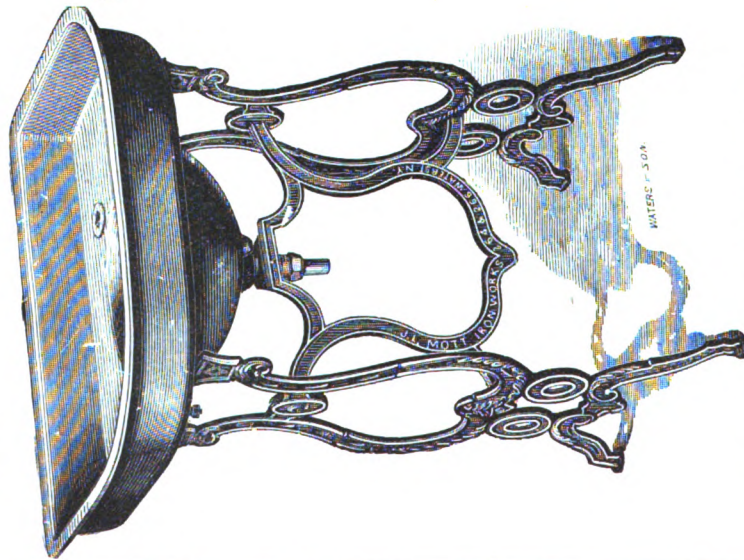
Height to front of Slab, 36 1/2 inches. Height to top of Back, 34 inches. Length of Back, 30 inches. Diameter of Bowl, 12 inches.

A. CARR, MANUFACTURER, NEW YORK.

MOTT'S WASH STAND.

WITH OVERFLOW
ON FRAME.

No. 47. Fig. 482.



This pattern has an overflow attached to the basin.

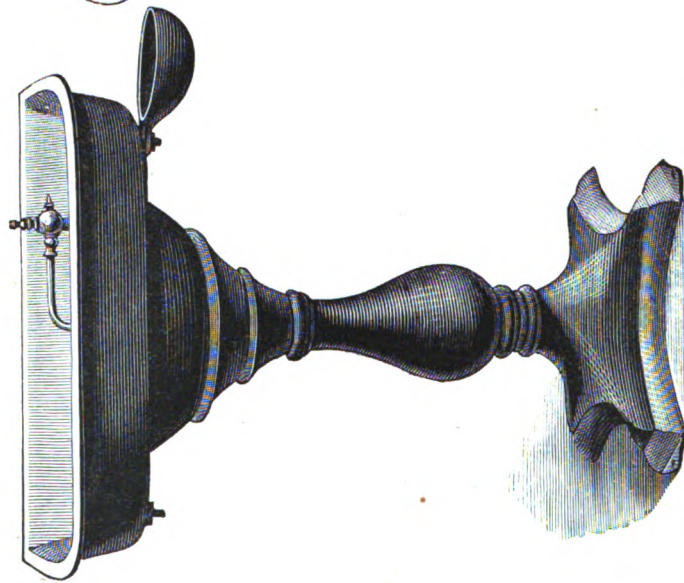
Plain, Painted, Galvanized, or Enameled Slab and Bowl.

Height, 31½ inches. Length on Back, 24½ inches.
Width, 19½ inches. Diameter of Bowl, 13 inches.

MOTT'S WASH STAND.

ON STANDARD
WITH SOAP CUP.

No. 46. Fig. 483.



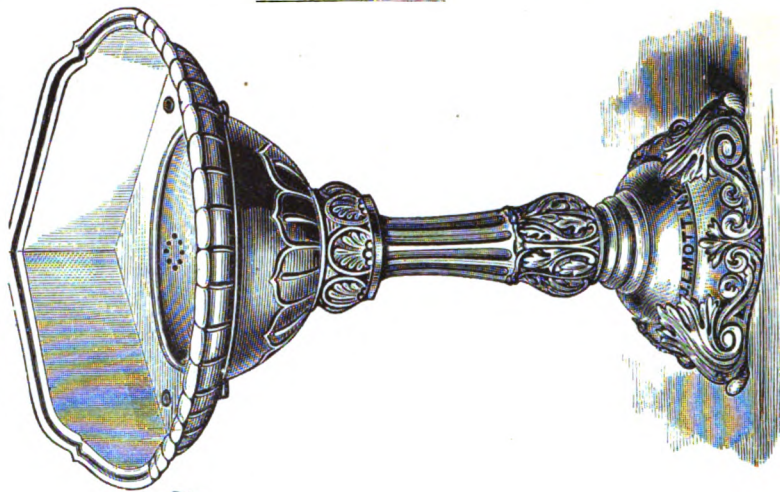
Diameter of Bowl, 13 inches. 24 inches on the Back.
28½ inches high. 19 inches on Side.

This is a new and beautiful article. It is made in such a way as to combine Bowl, Stand, &c. The waste water in passing out runs through the standard. There is also an enameled soap cup, which swings in and out, as shown by the cut.

MOTT'S CORNER WASH STAND.

ON STANDARD.
WITH OVERFLOW.
(New Design.)

No. 45½. Fig. 484.



Height to front of Slab, 29 inches. Height to top of Back, 32½ inches. Length of Side, 16 inches. Width of Bowl, 12 inches.

A. CARP, MANUFACTURER, NEW YORK.

DOUBLE WASH STAND..

No. 48.

Fig. 485.



Height, 31 $\frac{1}{4}$ inches. Length on back, 46 inches. Width, 19 $\frac{1}{4}$ inches. Diameter of Bowl, 13 inches.

HALF-CIRCLE SLAB AND BOWL.

No. 50.

Fig. 486.



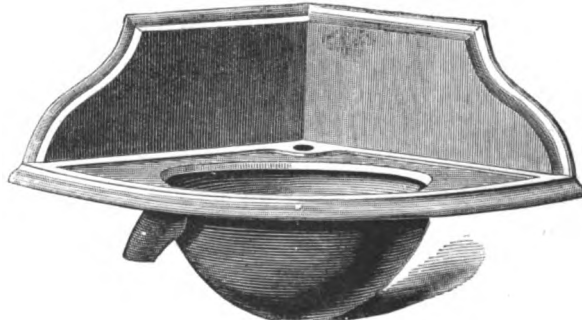
With overflow, same as in cut on page 159; detached from Iron Frame. In ordering please state if for hot or cold water, or both, and whether brass plug and stopper are wanted. Plain, Painted, Galvanized and Enameled.

CORNER SLAB AND BOWL.

FOR WASH STAND, WITH OVERFLOW.

No. 51.

Fig. 487.



Same as in cut on page 159, detached from Iron Frame. Where wood casing is required, this Slab and Bowl is used in preference to marble, being very easily set up, and at about half the cost. In ordering, please state if for hot or cold water, or both, and whether brass plug and stopper are wanted. Plain, Painted, Galvanized and Enameled.

URINALS.

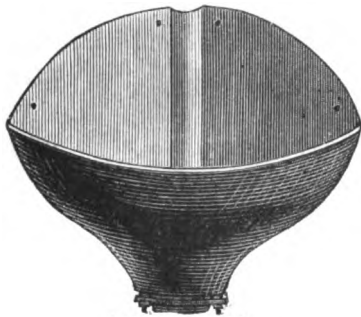
PLAIN, PAINTED AND ENAMELED.

CORNER.

With Opening behind for Lead Pipe.

No. 67.

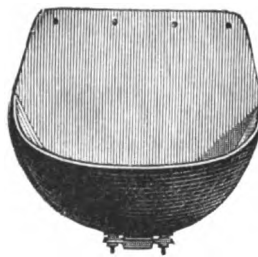
Fig. 488.



12 inches on Side.

HALF CIRCLE.

No. 68. Fig. 489.



No. 1.—Length on back, 12 inches.

No. 68. Fig. 490.



No. 2.—Length on back, 15 inches.

CORNER URINALS. ENGLISH PATTERN.

No. 69. Fig. 491.



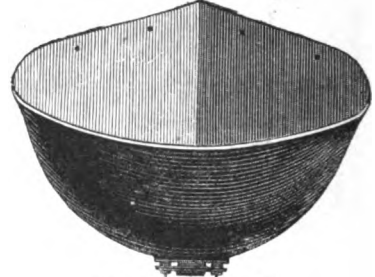
No. 1.—7 inch on side.

No. 69. Fig. 492.



No. 2.—9 inch on side.

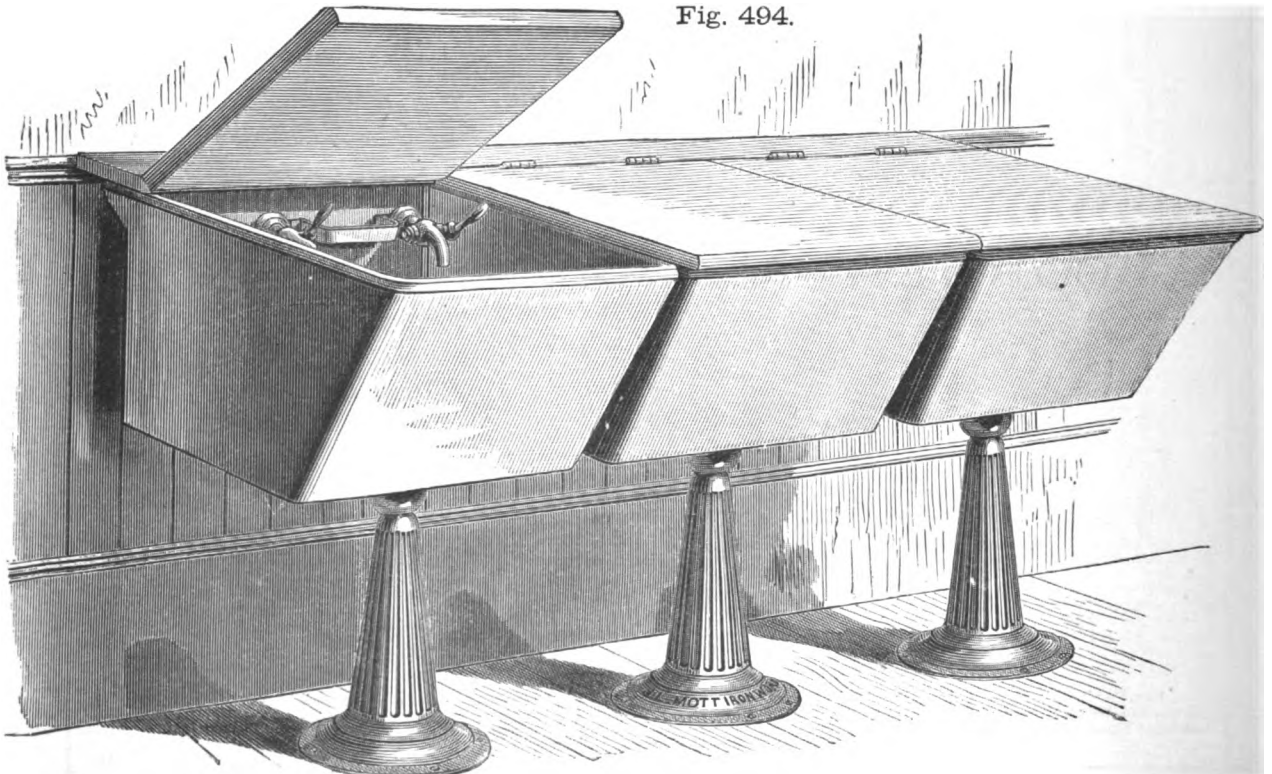
No. 69. Fig. 493.



No. 3.—12 inch on side.

MOTT'S NEW PATTERN IRON WASH TUBS.

Fig. 494.



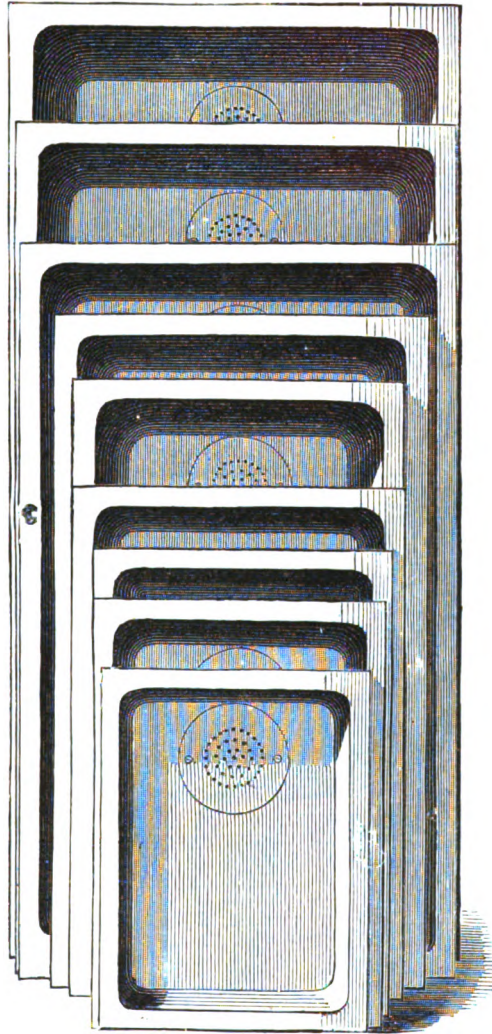
GALVANIZED OR ENAMELED.—Height, including Standard, 32 inches; Length of Single Tub, 24 inches; Width at Bottom, 13 inches; Width on Top, including Flange, 24 inches; Width on Top, not including Flange, 21 inches; Depth, 14 inches.

A. CARR, MANUFACTURER, NEW YORK.

SQUARE SINKS.

PLAIN, ENAMELED AND GALVANIZED.

Fig. 495.



SIZES OF SQUARE SINKS.

16½ x 12½	4½ inches deep.
18 x 12	6 " "
20 x 14	4½ " "
22 x 14	5 " "
23 x 15	5 " "
24½ x 16	5 " "
25½ x 15½	5 " "
26 x 12½	6 " "
20 x 14	6 " "
24½ x 16	6 " "
24 x 18	6 " "
25½ x 17	6 " "
27 x 15	6 " "
24 x 20	6 " "

28 x 17	6 inches deep.
28 x 20	6 " "
30 x 16	6 " "
30 x 18	6 " "
30 x 20	6 " "
32½ x 18	6 " "
32½ x 21	6 " "
36 x 18	6 " "
36 x 21½	6 " "
38 x 20	6 " "
42 x 22	6 " "
48 x 20	6 " "
48 x 23	6 " "
50 x 24	6½ " "

50 x 26	6½ inches deep.
76 x 22	7 " "
30 x 24	8 " "
62 x 22	8 " "
56 x 32	9 " "
78 x 28	10 " "
20 x 14	12 " "
24 x 20	13 " "
36 x 21	13 " "
23 x 15	15 " "
41 x 16	16 " "
48 x 20	17 " "
94 x 24	10 " "

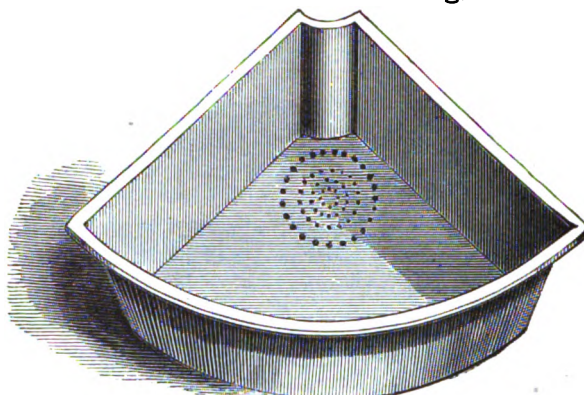
SINKS.

PLAIN, ENAMELED AND GALVANIZED.

CORNER.

No. 2.

Fig. 496.



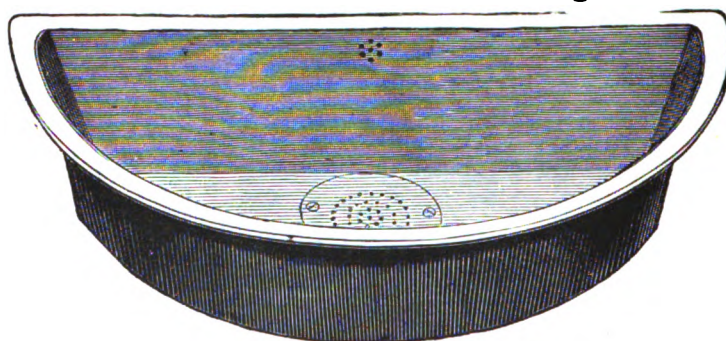
No. 1. Side, 17 inches. Front, 25 inches. Depth, 6 inches.
" 2. " 20 " " 29 " " 6 "

No. 3. Side, 22 inches. Front, 31 inches. Depth, 6½ inches.
" 4. " 18½ " " 25 " " 12 "

HALF CIRCLE.

No. 3.

Fig. 497.



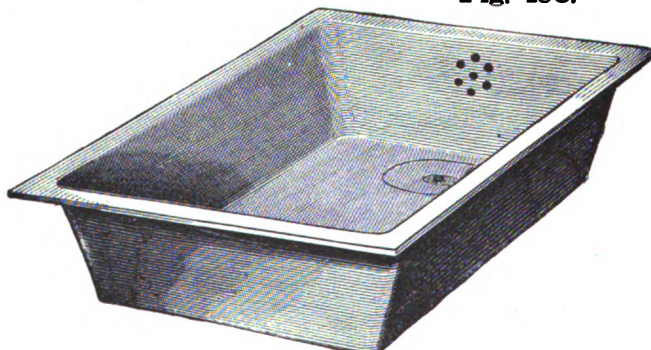
No. 1. Back, 24 inches. Width, 14 inches. Depth, 6 inches.
" 2. " 27 " " 11 " " 6 "

No. 2. Back, 28 inches. Width, 16 inches. Depth, 8 inches.
" 4. " 31½ " " 17 " " 6 "

PATENT OVERFLOW SINK.

No. 4.

Fig. 498.



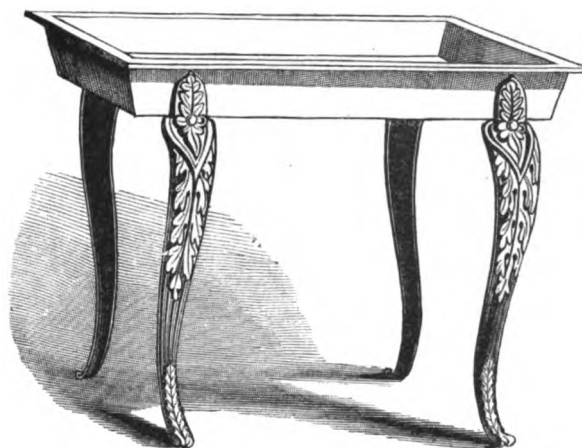
MADE SAME SIZES AS PLAIN SINKS ON PAGE 163.

They are particularly adapted to Tenement Houses, where Sinks are apt to overflow through neglect of persons using them.

SINKS WITH LEGS.

No. 8.

Fig. 499.

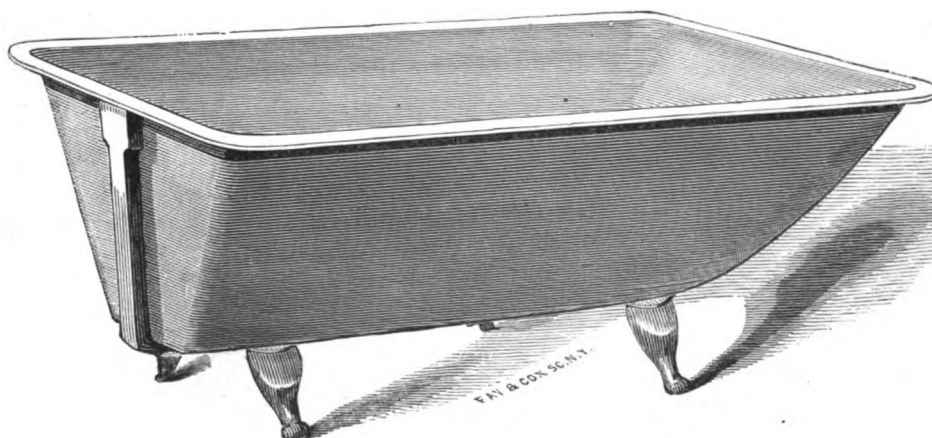


By placing a slip of board on the wall, and bolting the Sink to it, two legs for the front is all that is required. They make a neat finish, and save the expense of boxing under part of the Sink.

CAST IRON BATH TUB.

PATENT OVERFLOW.

No. 28. Fig. 500.



These Baths are made expressly for Asylums, and, by casting bosses on the end of the tub, water can be let in and out at the bottom of the Bath. References can be given to institutions having them in use.

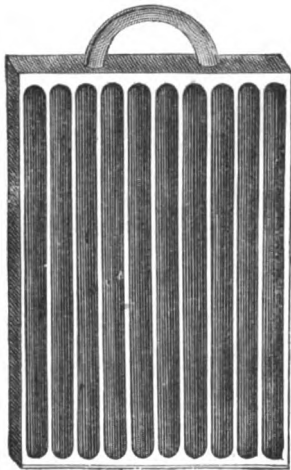
No. 1,	Length, 66 inches,	Width, 25 $\frac{1}{4}$ inches,	Depth, 18 $\frac{1}{2}$ inches, with overflow.
" 2,	" 72 "	" 25 $\frac{1}{4}$ "	" 18 $\frac{1}{4}$ " " "

SOLDER MOULDS.

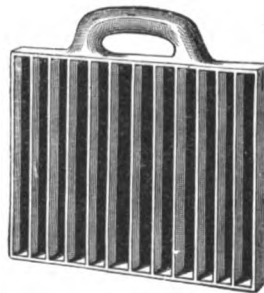
No. 26.

Fig. 501.

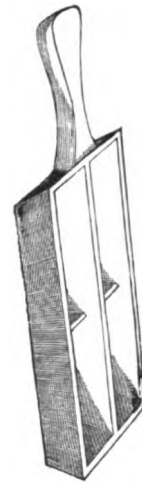
No. 27. Fig. 502.



Half Round Bar.



Square Bar.



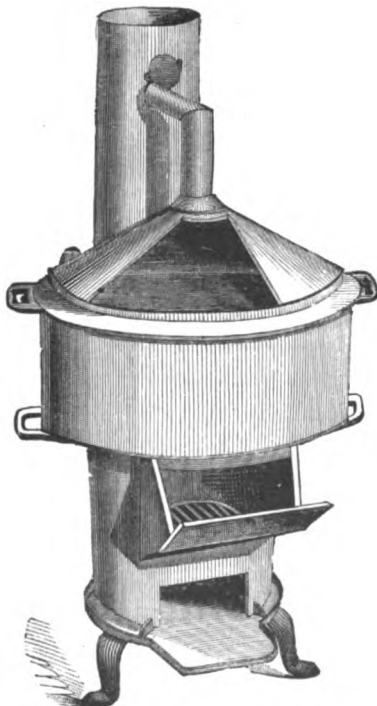
Two Bars. Four Bars.

PLUMBERS' FURNACE.

PATENT.

No. 25.

Fig. 503.

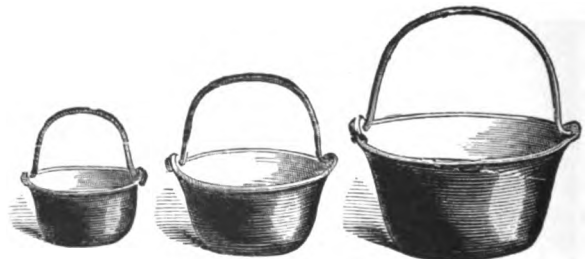


The above is expressly for melting metal.

Capacity of Kettle, 8 gallons.

SOLDER POTS.

No. 29. Fig. 504.



No. 1	Diameter on Top,	5 in.	No. 5	Diameter on Top,	9 in.
No. 2	"	6 in.	No. 6	"	10½ in.
No. 3	"	6½ in.	No. 7	"	13½ in.
No. 4	"	8 in.			

CHARCOAL FURNACES.

No. 30. Fig. 505.

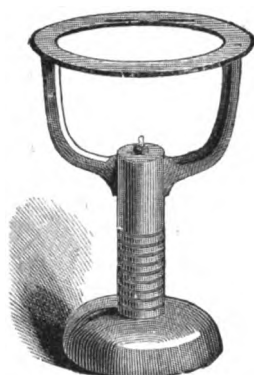


No. 2	Diameter on Top,	12 in.	No. 4	Diameter on Top,	14 in.
No. 3	"	13 in.	No. 5	"	15 in.

LOCKWOOD'S BOILER STAND.

No. 81.

Fig. 506.



This Stand can be raised or lowered at pleasure by cutting off the rings on Standard, as shown by the above cut. 12, 14, 16, 18, 20 inch Ring.

MOTT'S PATENT BOILER STAND.

No. 32.

Fig. 507.



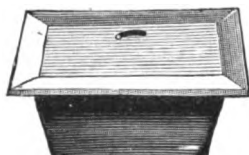
This Boiler Stand is particularly adapted for shipping. The top part being bolted to Standard can be taken apart, and each nested separately.

Same sizes as Lockwood's pattern, with 18, 20, 22, 24 and 30 inch Standard. Be particular when ordering to state height of Standard.

STOP COCK AND STREET WASHER BOXES.

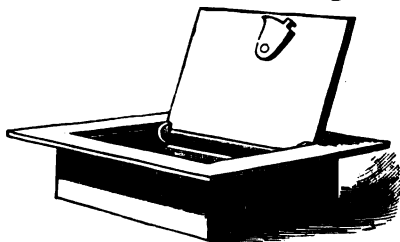
No. 84.

Fig. 508.



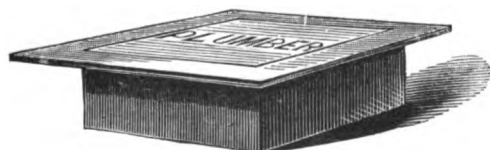
No. 85.

Fig. 509.



No. 35.

Fig. 510.



Plumbers' address cast on Covers to order.

BOILER STAND, WITH CONCAVE RING.

No. 36.

Fig. 511.



With Legs, 10, 18, 20, 22 and 24 inches Long.

12½ in. ring.	18 in. ring.
14 in. ring.	20 in. ring.
16 in. ring.	22 in. ring.

STREET WASHER ROD AND KEY.

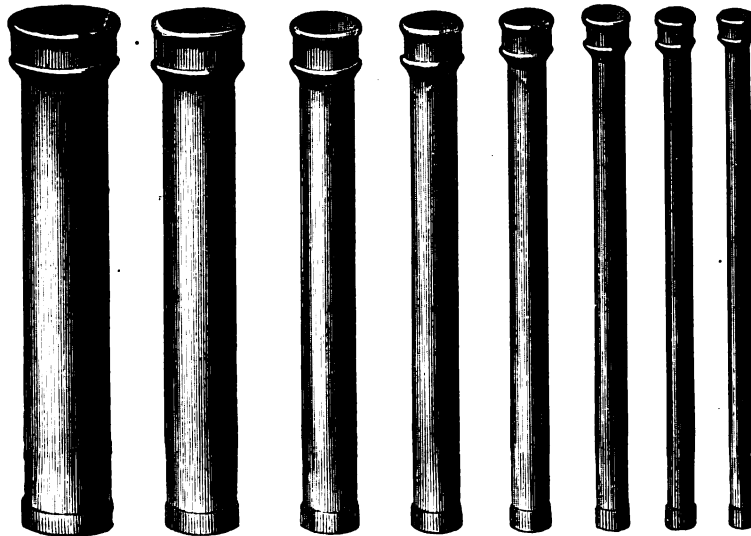
No. 33.

Fig. 512.



CAST IRON DRAIN, WATER AND SMOKE PIPES.

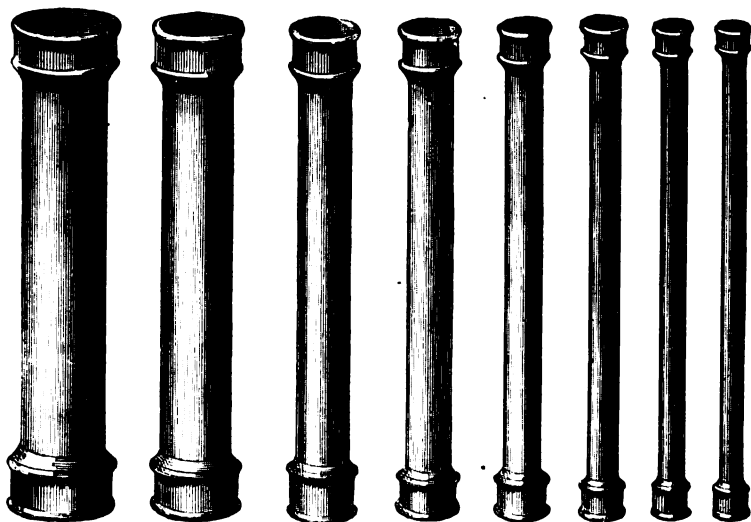
Fig. 513.



Sizes, 2, 3, 4, 5, 6, 7, 8, 10, 12 inches.

DOUBLE HUB PIPE.

Fig. 514.



Sizes, 2, 3, 4, 5, 6, 7, 8, 10, 12 inches.

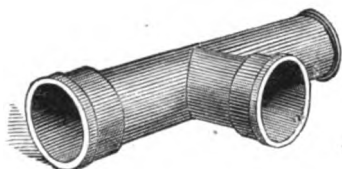
This pipe will be found very convenient, and a great saving where short pieces are required. When cut in two pieces, each piece can be used without the expense of either a sleeve or double hub.

CAST IRON FITTINGS FOR SOIL PIPE.

T BRANCH.

No. 72.

Fig. 515.

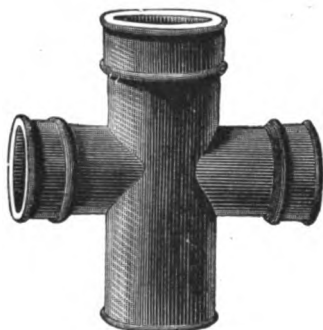


3 x 2 inches.	6 x 5 inches.	8 x 7 inches.
3 x 3 "	6 x 4 "	8 x 6 "
3 x 2 "	6 x 3 "	8 x 5 "
4 x 4 "	6 x 2 "	8 x 4 "
4 x 3 "	7 x 7 "	8 x 3 "
4 x 2 "	7 x 6 "	8 x 2 "
5 x 5 "	7 x 5 "	10 x 2 &c."
5 x 4 "	7 x 4 "	12 x 12 "
5 x 3 "	7 x 3 "	12 x 5 "
5 x 2 "	8 x 8 "	12 x 6 "
6 x 6 "		

CROSSES.

No. 73.

Fig. 517.

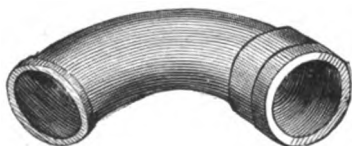


2 in. with 2 in. Branches	6 in. with 2 in. Branches.
3 " 8 "	7 " 7 "
3 " 2 "	7 " 6 "
4 " 4 "	7 " 5 "
4 " 3 "	7 " 4 "
4 " 2 "	7 " 3 "
5 " 5 "	7 " 2 "
5 " 4 "	8 " 8 "
5 " 3 "	8 " 7 "
5 " 2 "	8 " 6 "
6 " 6 "	8 " 5 "
6 " 5 "	8 " 4 "
6 " 4 "	8 " 3 "
6 " 3 "	8 " 2 "

QUARTER BENDS.

No. 76.

Fig. 519.



2, 3, 4, 5, 6, 7, 8, 10, 12 inches.

Y BRANCHES.

No. 74.

Fig. 516.



Sizes same as Double Y Branch below.

We make the above with all sizes of Outlets.
We also make them 2, 3 and 4 way to order.

DOUBLE Y BRANCHES.

No. 75.

Fig. 518.

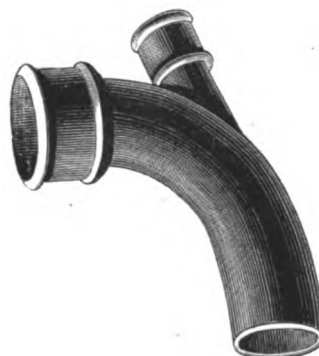


2 x 2 inch.	5 x 4 inch.	6 x 2 inch.
3 x 3 "	5 x 3 "	8 x 8 "
3 x 2 "	5 x 2 "	8 x 6 "
4 x 4 "	6 x 6 "	8 x 5 "
4 x 3 "	6 x 5 "	8 x 4 "
4 x 2 "	6 x 4 "	8 x 3 "
5 x 5 "	6 x 3 "	8 x 2 "

QUARTER BENDS.

No. 77.

Fig. 520.

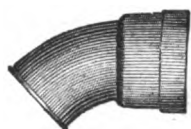


4 inch, with connection for 2 inch Pipe.

CAST IRON FITTINGS FOR SOIL PIPE.

ONE-EIGHTH BENDS.

No. 78. Fig. 521.



Sizes, 2, 3, 4, 5, 6, 7, 8, 10, 12 inches.

DOUBLE HUB BENDS.

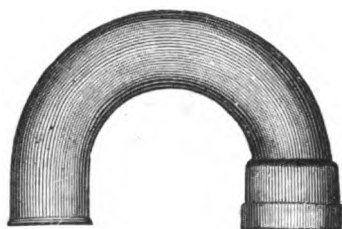
No. 79. Fig. 522



Sizes, 2, 3, 4, 5, 6 inches.

RETURN BENDS.

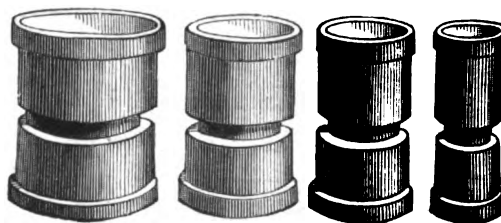
No. 80. Fig. 523.



Sizes, 2, 3, 4, 5, 6, 7, 8, 10, 12 inches.

DOUBLE HUBS.

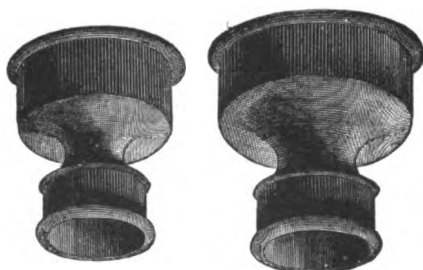
No. 81. Fig. 524.



Sizes, 2, 3, 4, 5, 6, 7, 8, 10, 12 inches.

REDUCING PIECES.

No. 82. Fig. 525.



To reduce from 4 in. to 2 in.	To reduce from 8 in. to 3 in.
" " 5 in. to 2 in.	" " 8 in. to 4 in.
" " 5 in. to 3 in.	" " 8 in. to 5 in.
" " 6 in. to 2 in.	" " 8 in. to 6 in.
" " 6 in. to 3 in.	" " 10 in. to 6 in.
" " 6 in. to 4 in.	" " 10 in. to 7 in.
" " 7 in. to 3 in.	" " 10 in. to 8 in.
" " 7 in. to 4 in.	" " 12 in. to 10 in.
" " 7 in. to 5 in.	

To reduce 1 inch, only use a DOUBLE HUB of the smaller size.

STRAIGHT SLEEVE.

No. 83. Fig. 526.



Sizes, 2, 3, 4, 5, 6, 7, 8, 10, 12 inches.

SINGLE HUB.

No. 85. Fig. 527.



Sizes, 2, 3, 4, 5, 6, 7, 8, 10, 12 inches.

THIMBLE.

TO CONNECT LEAD TRAPS TO IRON SOIL PIPE.

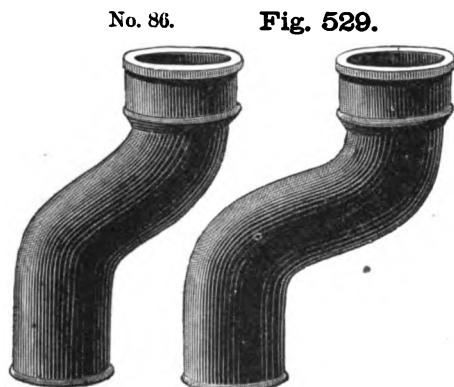
No. 84. Fig. 528.



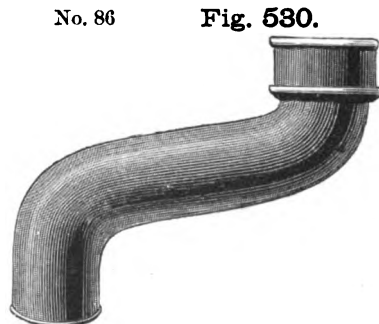
Four Inch.

CAST IRON FITTINGS FOR SOIL PIPE.

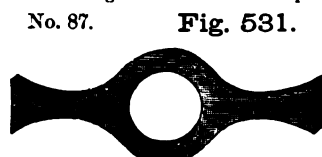
OFFSETS.



2 in. to	Offset	4 in.
2 "	"	8 "
2 "	"	12 "
3 "	"	4 "
3 "	"	8 "
3 "	"	12 "
4 "	"	4 "
4 "	"	8 "
4 "	"	12 "
5 "	"	4 "
5 "	"	8 "
5 "	"	12 "
6 "	"	4 "
6 "	"	8 "
6 "	"	12 "

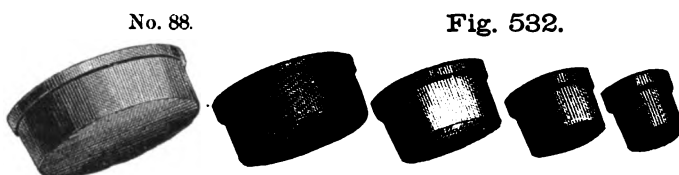


PIPE RESTS. For sustaining Lead and Iron Soil Pipe.

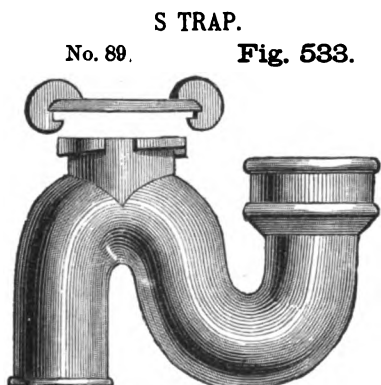


Sizes, 2, 3, 4, 5, 6, 8, 10 inches.

PIPE STOPPERS OR PLUGS.



Sizes, 2, 3, 4, 5, 6 inches.



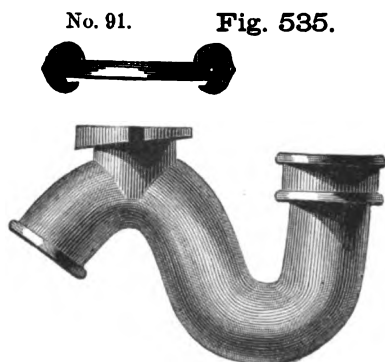
Sizes, 2, 3, 4, 5, 6 inches. 4 inch made with connection for 2 inch pipe.

3-4 S TRAP.



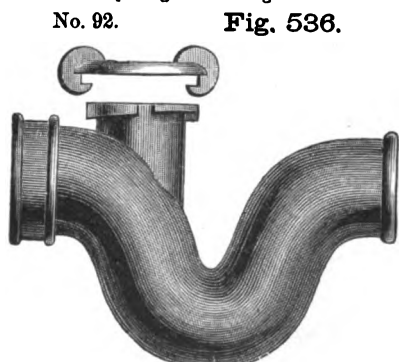
RUNNING TRAP.

With opening for cleaning out.



Sizes, 3, 4, 5 inches.

4 inch made with connection for 2 inch pipe.



Sizes, 2, 3, 4, 6 inches.

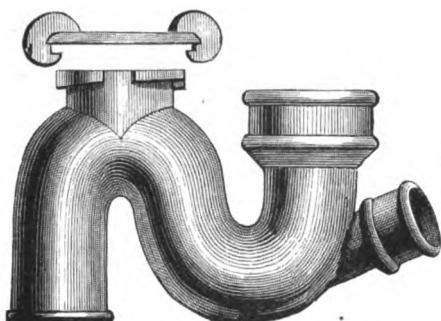
4 inch made with connection for 2 inch pipe.

CAST IRON FITTINGS FOR SOIL PIPE.

S TRAP.

No. 93.

Fig. 537.



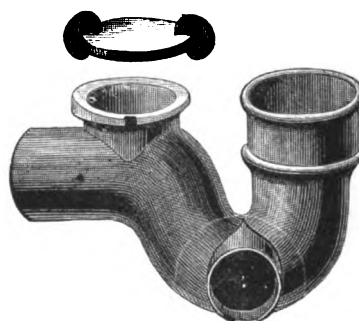
With Outlet on Heel.

4 inch with connection for 2 inch pipe. Can also be had with Outlet on Side, same as Half S Trap No. 94.

HALF S TRAP.

No. 94.

Fig. 538.



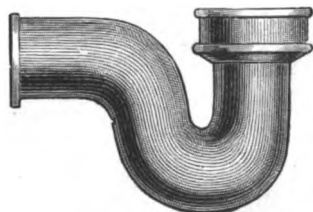
With Outlet on Side.

4 inch, with connection for 3 inch pipe. Can also be had with Outlet on Heel, same as S Trap No. 93.

HALF S TRAP.

No. 95.

Fig. 539.



4 inch, without hand opening.

Bosses cast on Traps to order.

S HOPPER TRAP.

No. 96.

Fig. 540.



Size, 4 inches.

3-4 S HOPPER TRAP.

No. 97.

Fig. 541.



Size, 4 inches. Flanged.

HALF S HOPPER TRAP.

No. 98.

Fig. 542.



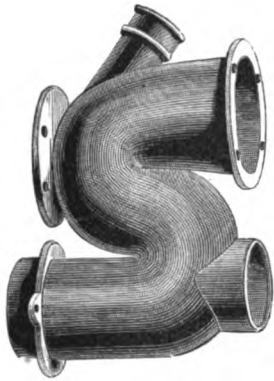
Size, 4 inches. Flanged.

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S HOPPER TRAP. STUBENBORD'S PATENT TRAP. S HOPPER TRAP.

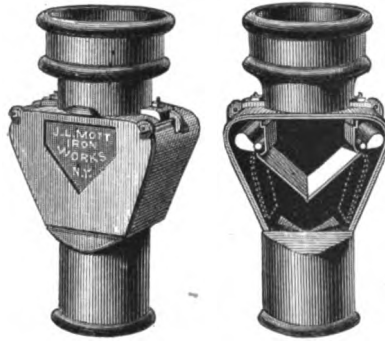
No. 99.

Fig. 543.



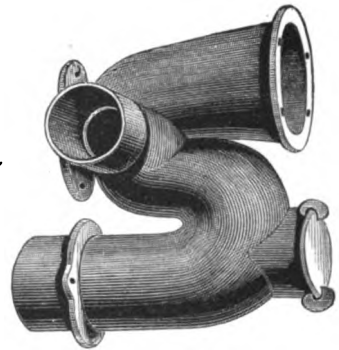
Flanged. With 2 inch Outlet on Heel.

Fig. 544.



No. 100.

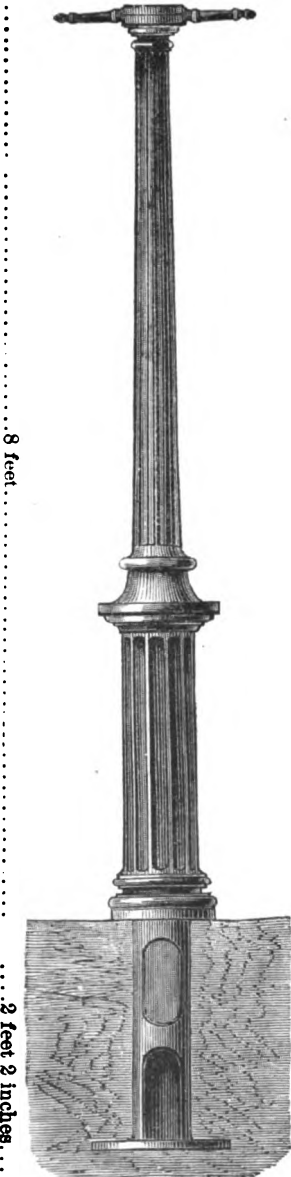
Fig. 545.



Flanged With 2 inch Outlet on Side.

A. CARR, MANUFACTURER, NEW YORK.

Supplied with or without Lanterns.

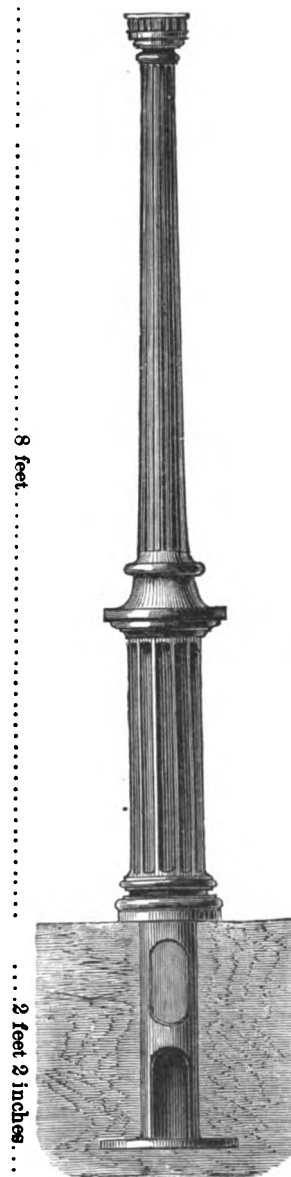


No. 137.

With Cross Bar.

Fig. 547.

8 feet
.....
2 feet 2 inches



No. 138.

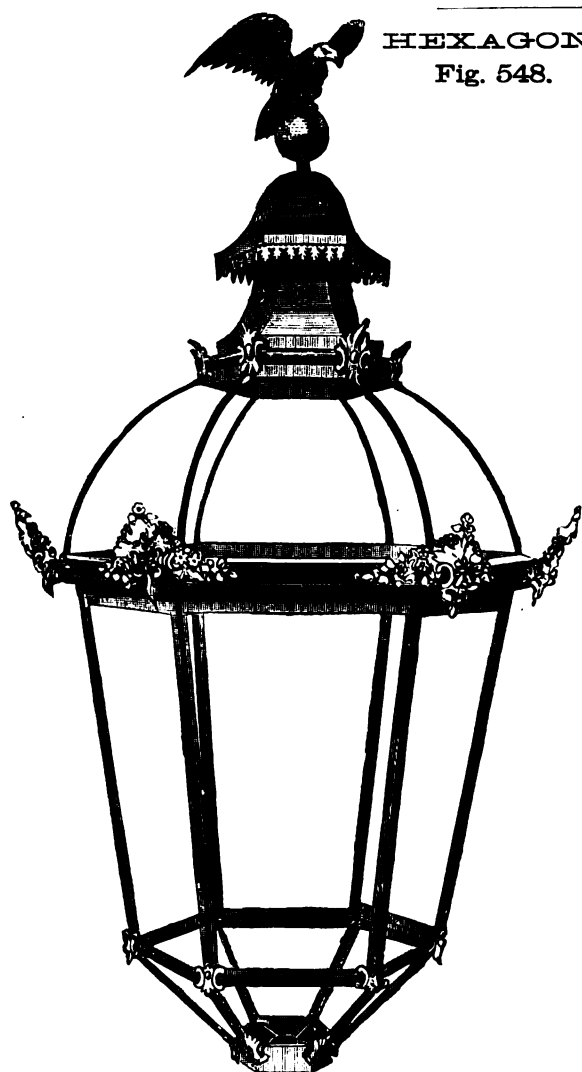
With Cap.

Fig. 546.

8 feet
.....
2 feet 2 inches

LAMP POSTS.

STREET AND FANCY LANTERNS.

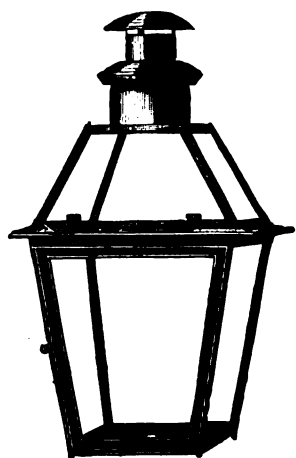


HEXAGON.

Fig. 548.

FOR GAS.

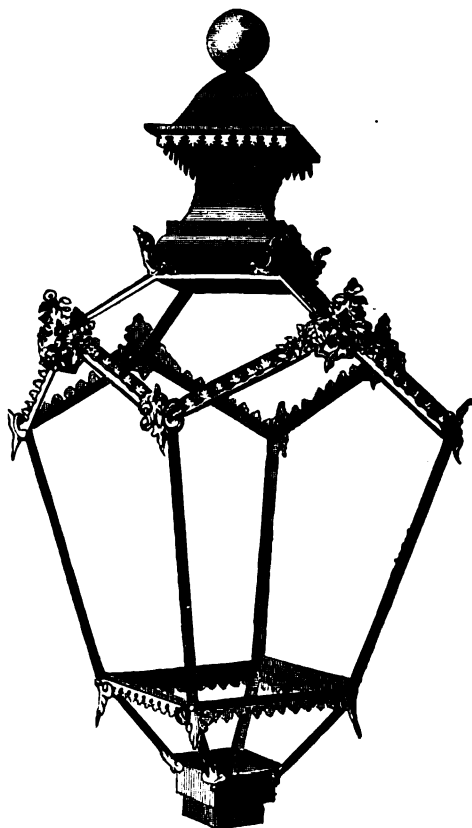
Fig. 550.



SQUARE LANTERN.

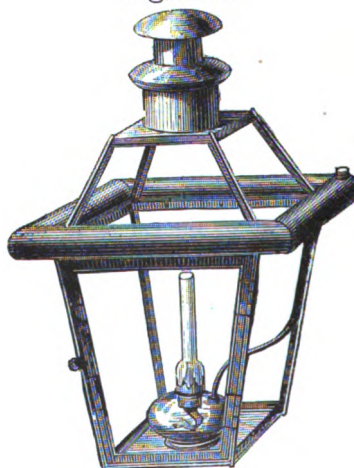
REVERSED TOP & BOTTOM.

Fig. 549.



FOR KEROSENE.

Fig. 551.

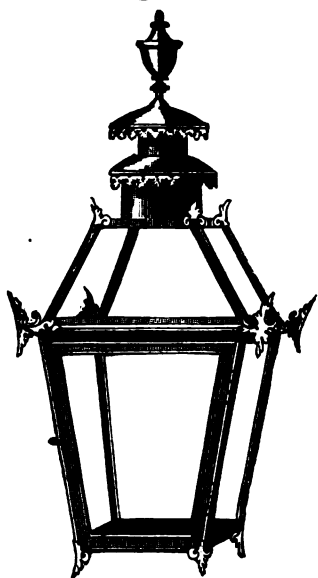


A. CARR, MANUFACTURER, NEW YORK.

STREET AND FANCY LANTERNS.

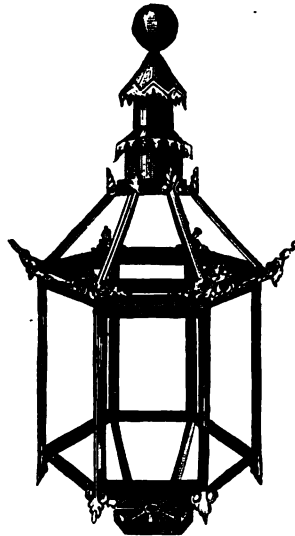
FANCY.

Fig. 552.



HEXAGON.

Fig. 553.



OCTAGON.

SMALL CORNERS.

Fig. 554.



OCTAGON.

SMALL CORNERS, TAPERS.

Fig. 555.

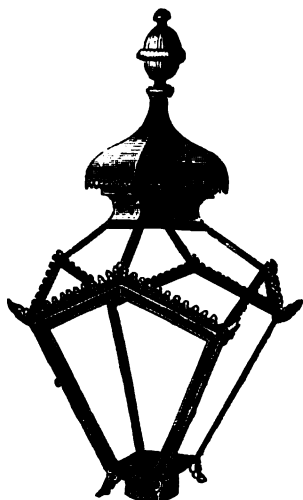


STREET AND FANCY LANTERNS

SQUARE LANTERN.

REVERSED TOP.

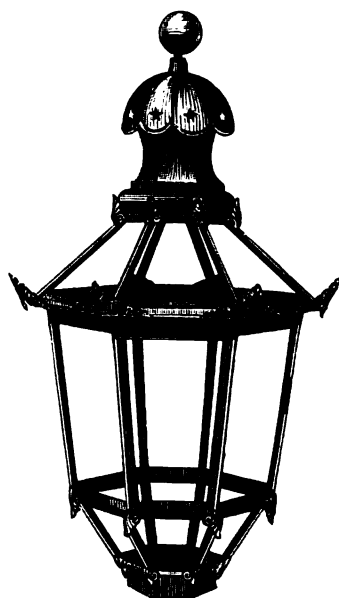
Fig. 556.



HEXAGON.

TAPER.

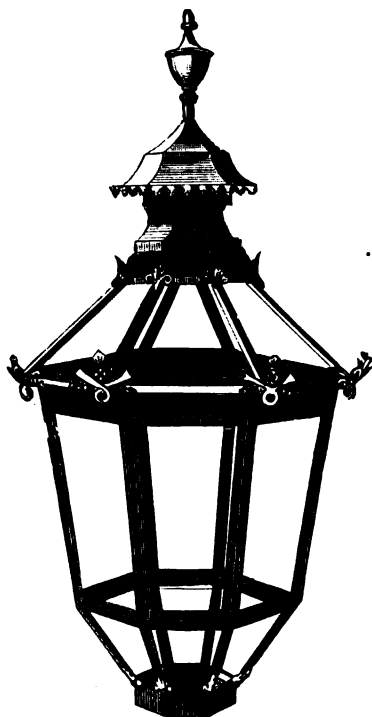
Fig. 557.



HEXAGON.

TAPER, FANCY HEAD.

Fig. 558



OCTAGON.

SQUARE TOP AND BOTTOM.

Fig. 559.

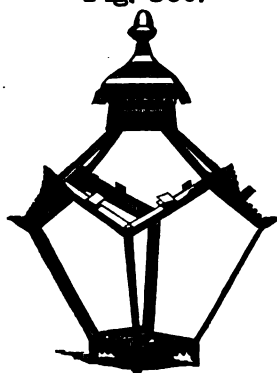


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STREET AND FANCY LANTERNS.

SQUARE—REVERSED TOP.

Fig. 560.



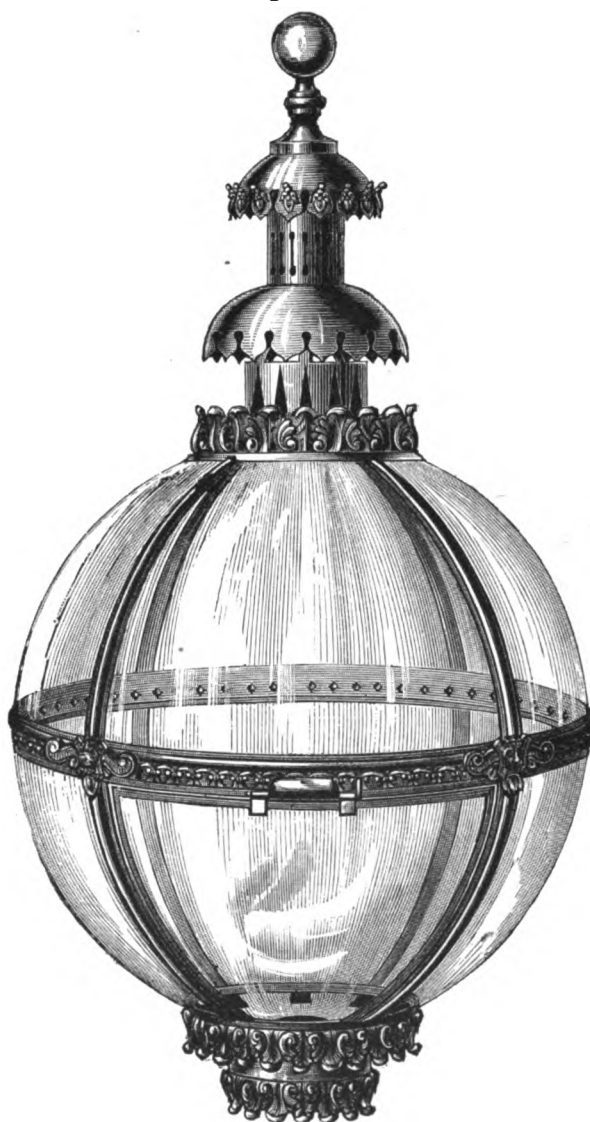
PRINCE ALBERT.

Fig. 561.



GLOBE LAMP,
EIGHT PANELS.

Fig. 562.



STREET AND FANCY LANTERNS.

STREET LAMP.

WITH NUMBERS, ETC.

Fig. 563.



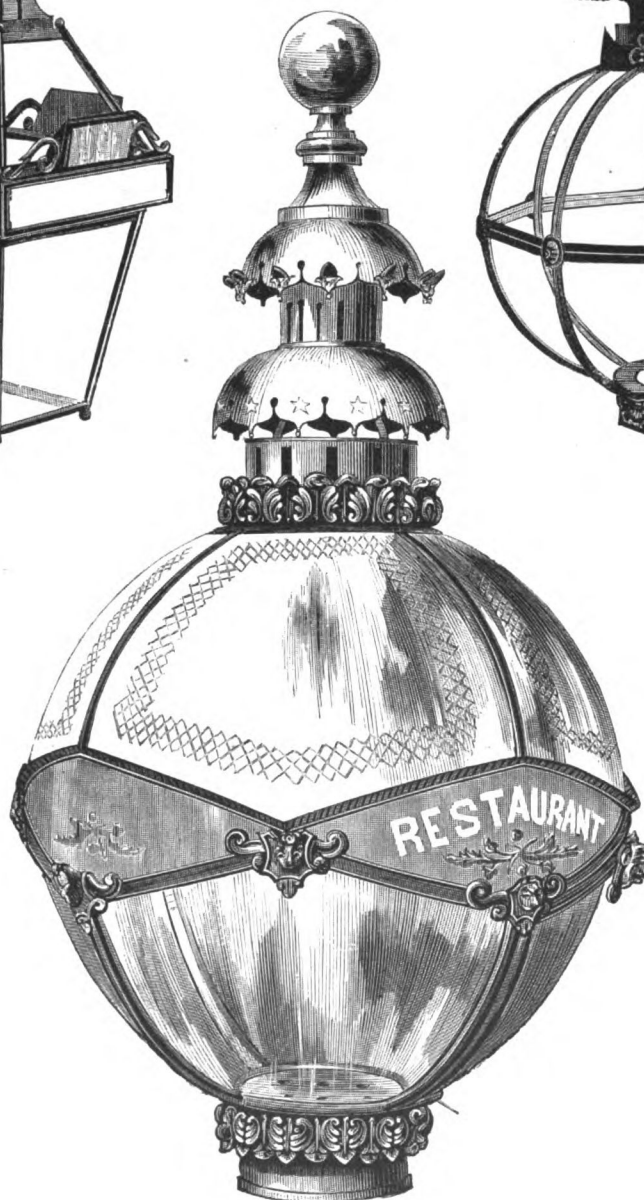
GLOBE LAMP.

Fig. 564.



RESTAURANT GLOBE LAMP.

Fig. 565.

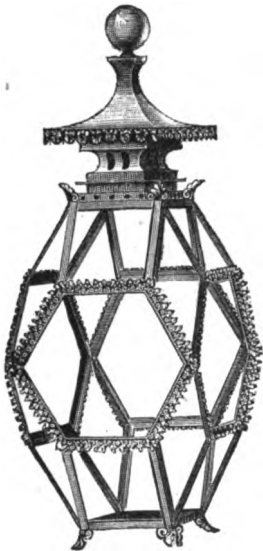


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STREET AND FANCY LANTERNS.

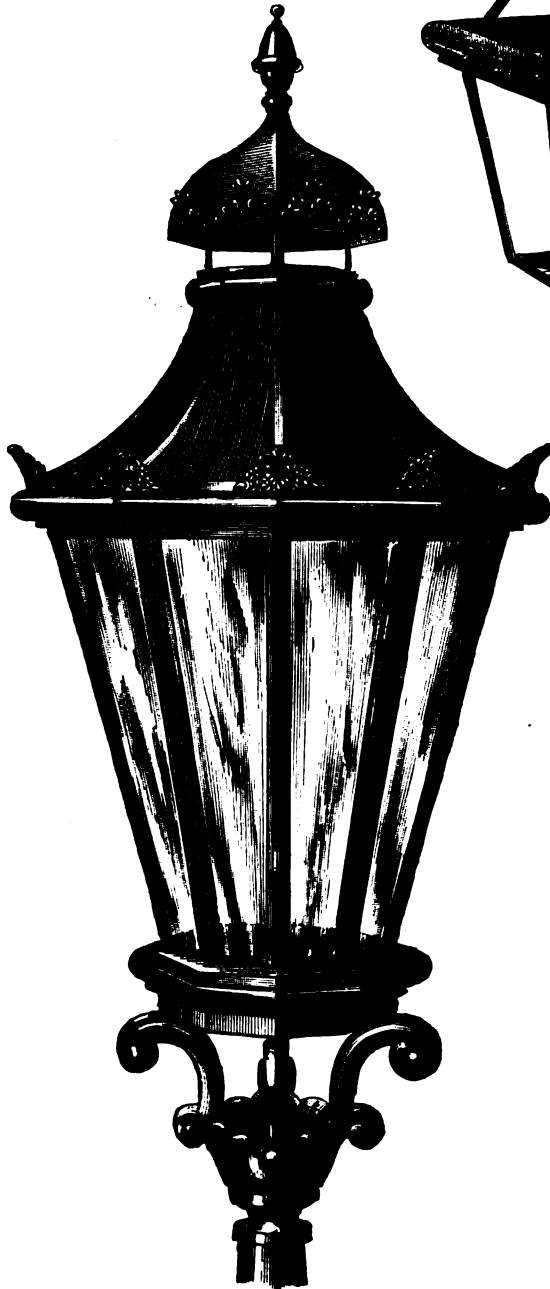
FANCY DIAMOND.

Fig. 566.



OPERA HOUSE
LAMP.

Fig. 568.



GASOLINE.

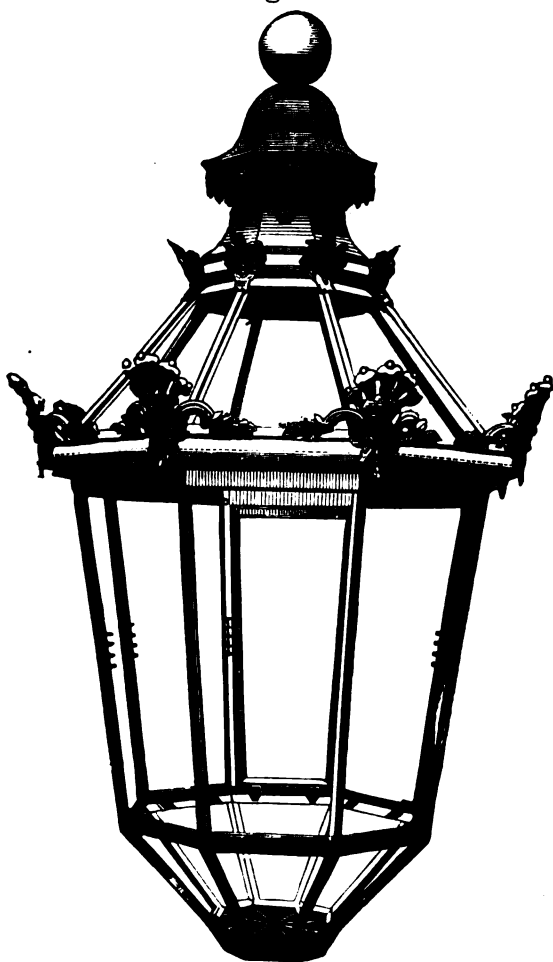
Fig. 567.



STREET AND FANCY LANTERNS.

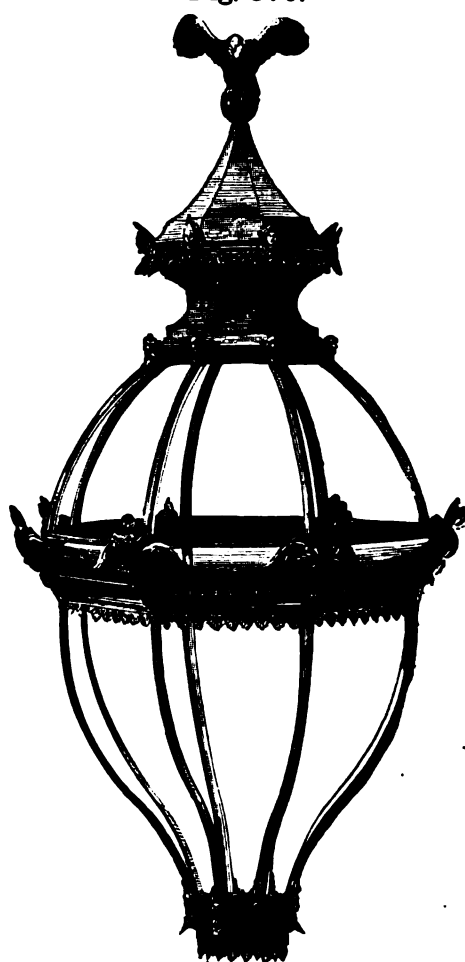
HEXAGON.

Fig. 569.



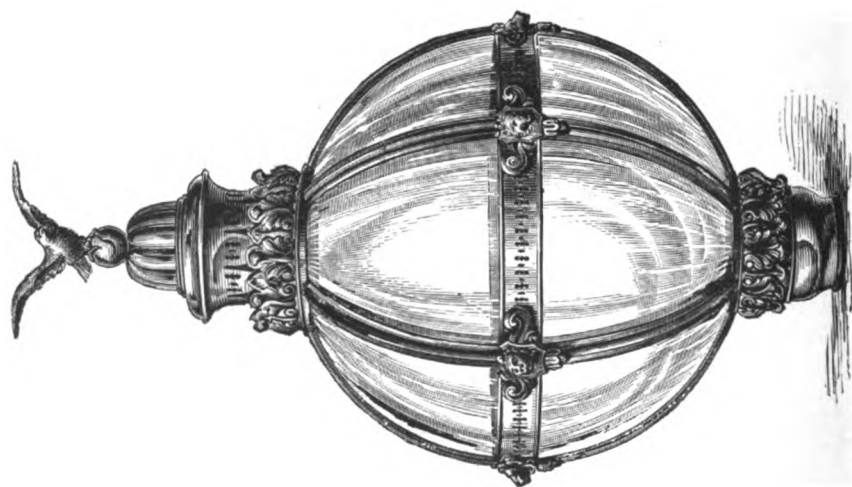
BALLOON.

Fig. 570.



GLOBE LAMP.

Fig. 571.



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GROUND GLOBES.

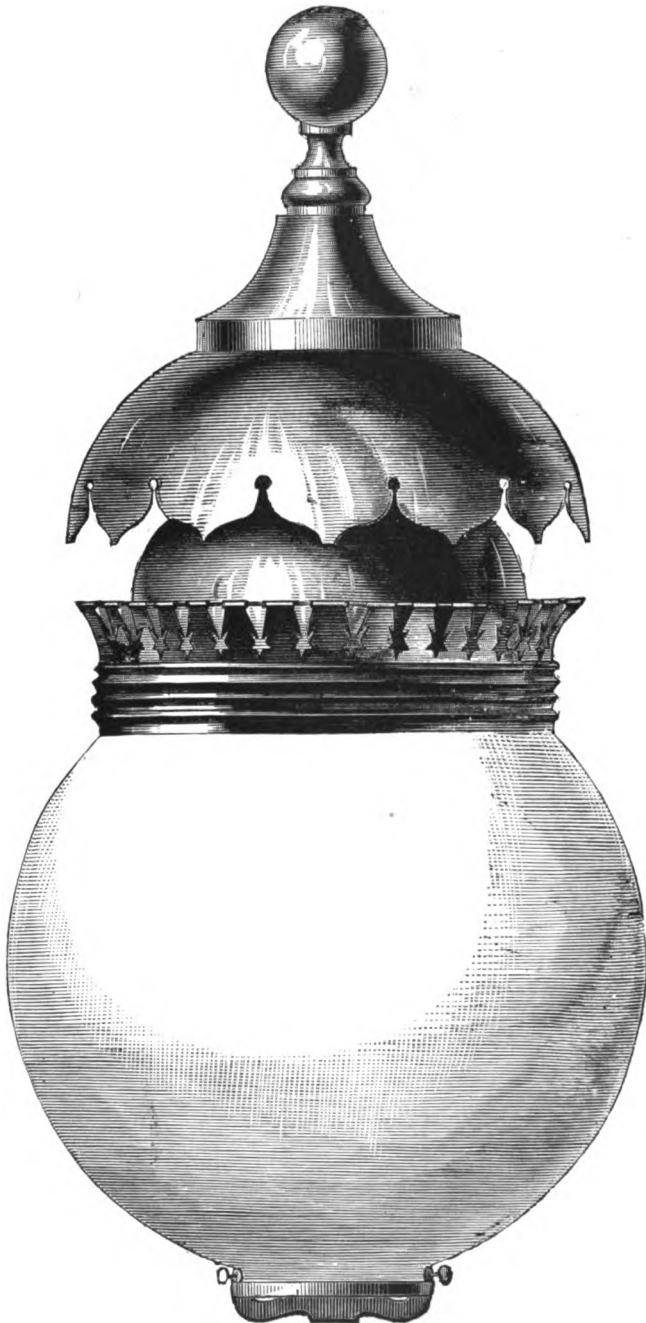
WITH HOLDER AND FANCY
CANOPY.

Fig. 572.



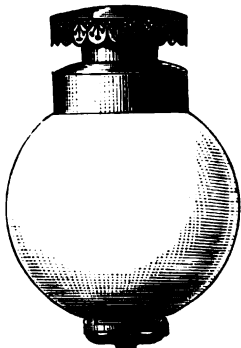
WITH HOLDER AND SPUN BRASS CANOPY.

Fig. 575.



WITH HOLDER AND CANOPY.

Fig 573.



WITH HOLDER AND CANOPY.

Fig. 574.



STREET AND FANCY LANTERNS.

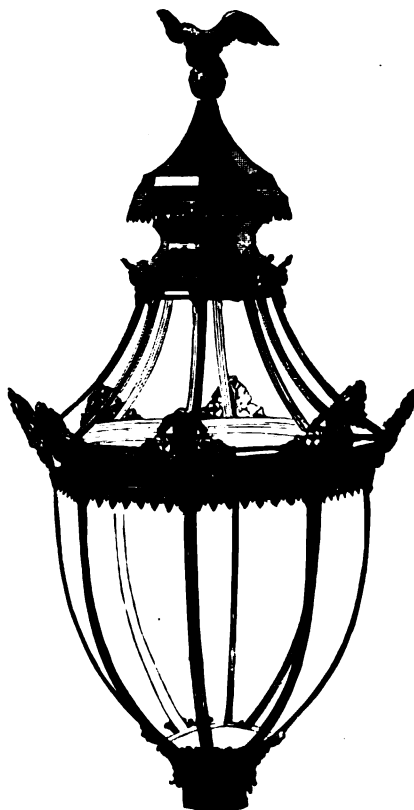
OCTAGON.
SMALL CORNERS, TAPER.

Fig. 576.



GRAND CENTRAL.

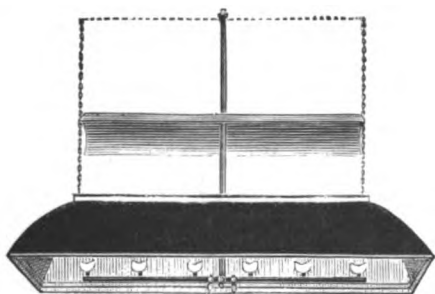
Fig. 577.



REFLECTORS.

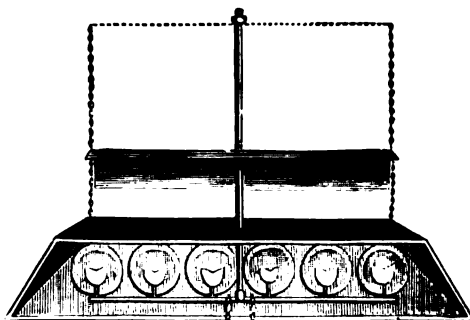
SQUARE END.

Fig. 578.



CONCAVE SIDE.

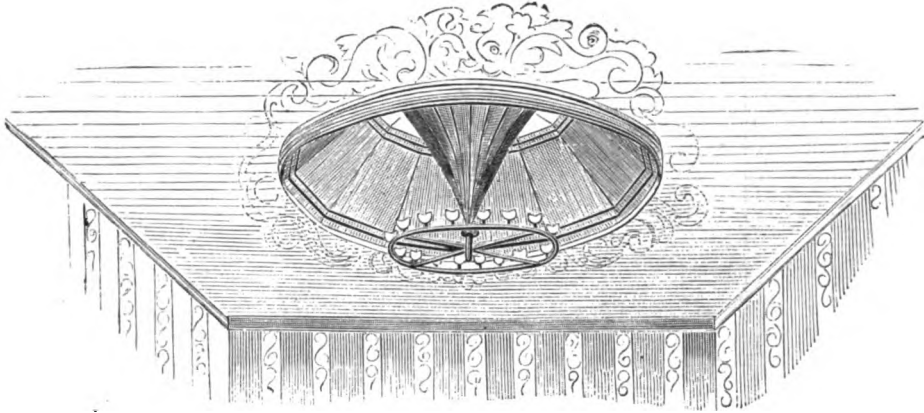
Fig. 579:



REFLECTORS

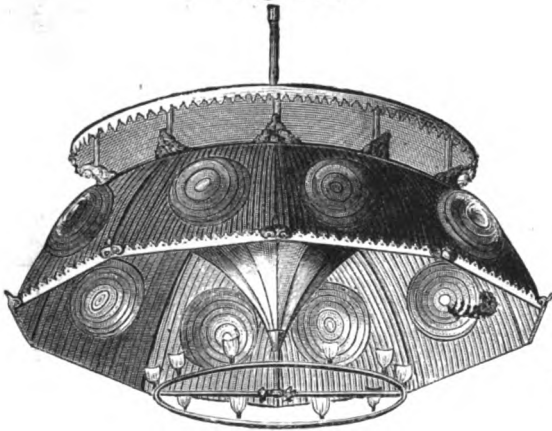
(INSERTED IN THE CEILING.)

Fig. 580.



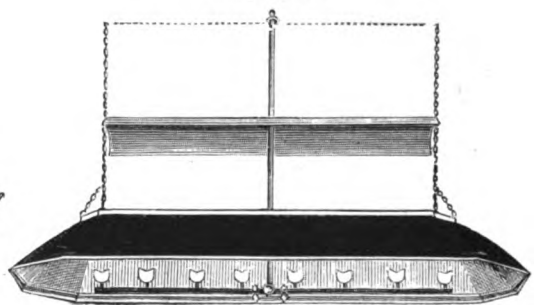
EXCELSIOR—WITH CONCAVES.

Fig. 581.



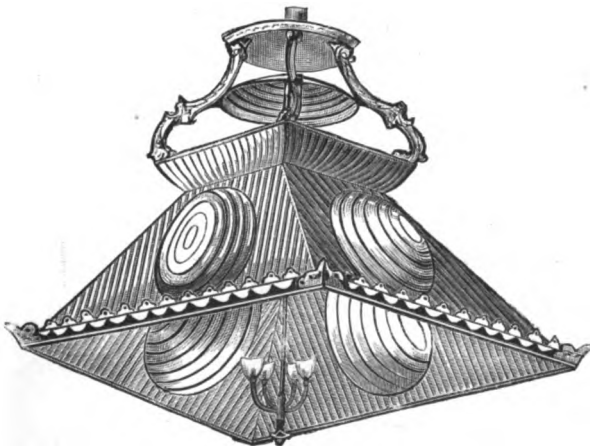
OCTAGON END.

Fig. 582.



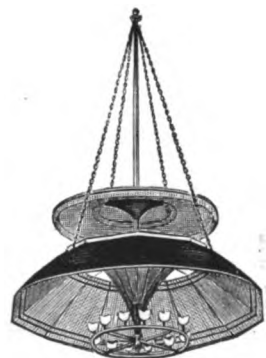
EXCELSIOR—WITH CONCAVES.

Fig. 583.



CEILING.

Fig. 584.

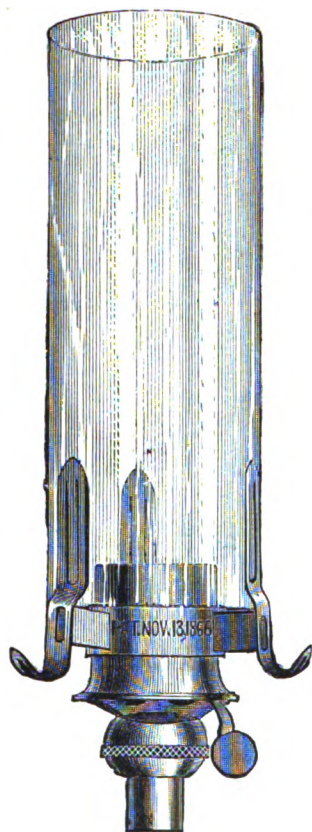


ARGAND BURNERS

(NOISELESS.)

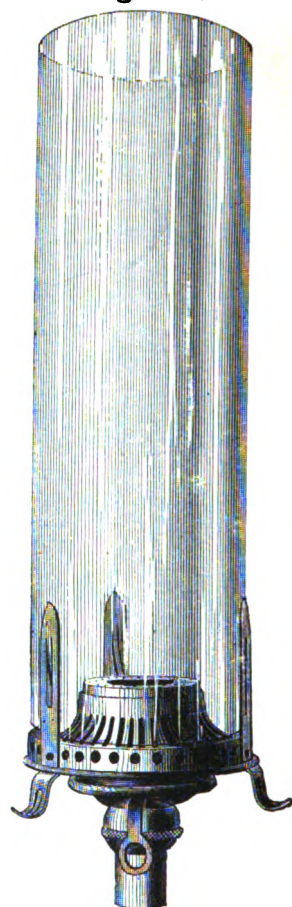
WITH OPEN SPRING HOLDER.

Fig. 585.



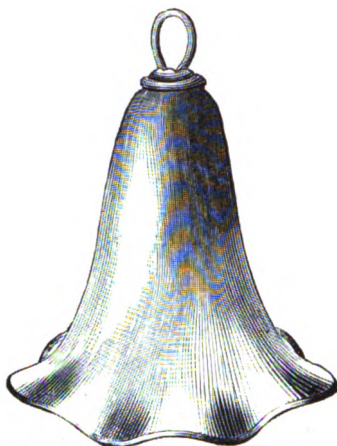
WITH GRECIAN HOLDER.

Fig. 586.



SMOKE BELL.

Fig. 587.



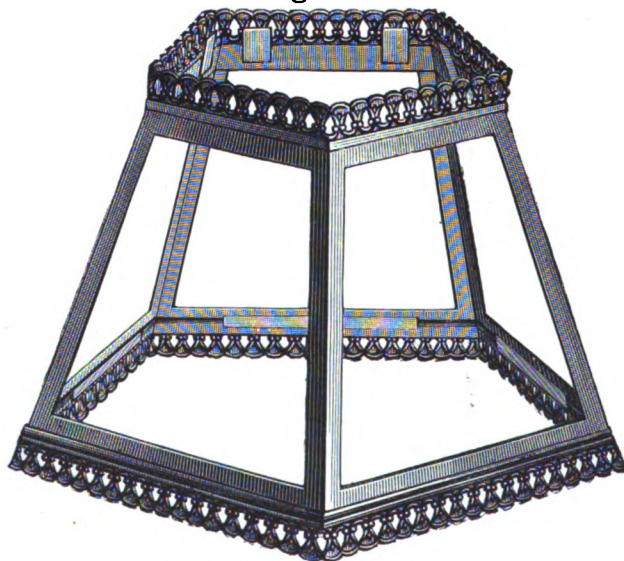
SMOKE SHADE.

Fig. 588.



FRAME FOR PORCELAIN PLATES.

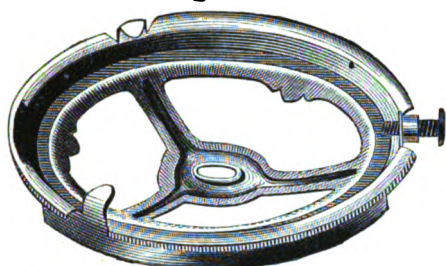
Fig. 589.



A. CARP. MANUFACTURER, NEW YORK.

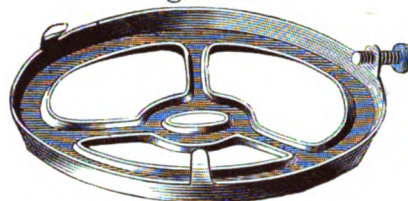
GLOBE HOLDER,
FANCY.

Fig. 590.



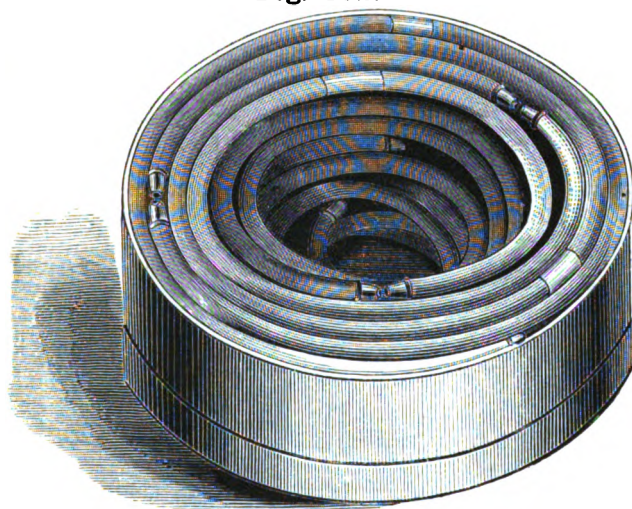
GLOBE HOLDER.
COMMON.

Fig. 591.



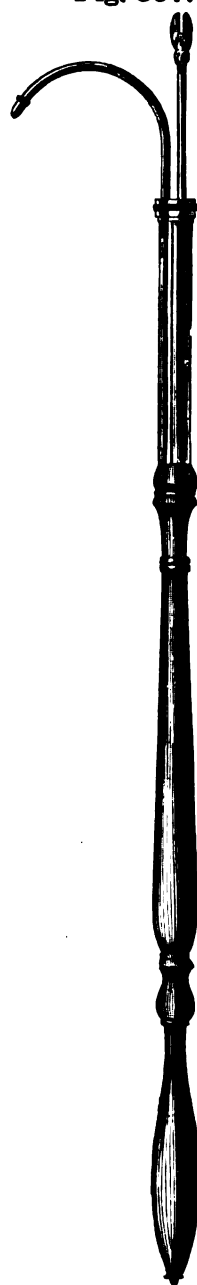
MOHAIR TUBE.

Fig. 592.



ALCOHOL TORCH.

Fig. 597.



TAPER SLIDE AND KEY.

Fig. 593.



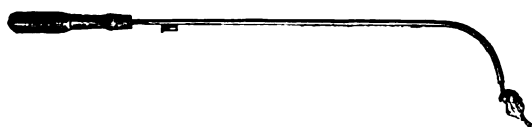
GAS KEY.

Fig. 594.



TAPER HOLDER, CURVED.

Fig. 595.



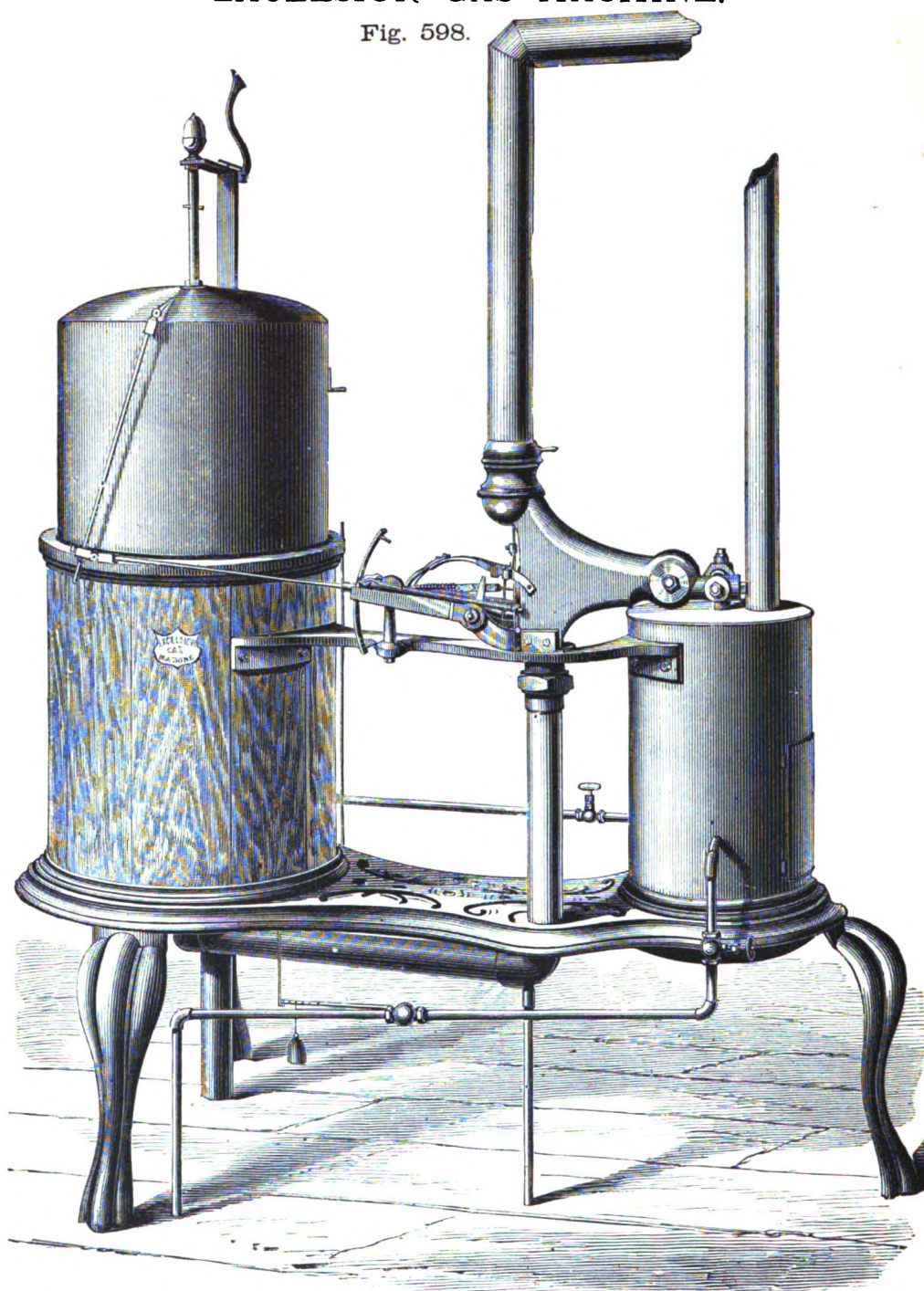
TAPER HOLDER, STRAIGHT.

Fig. 596.



EXCELSIOR GAS MACHINE.

Fig. 598.



A. CARR, MANUFACTURER, NEW YORK.

Awarded Grand Medal of Progress, Vienna, 1873.

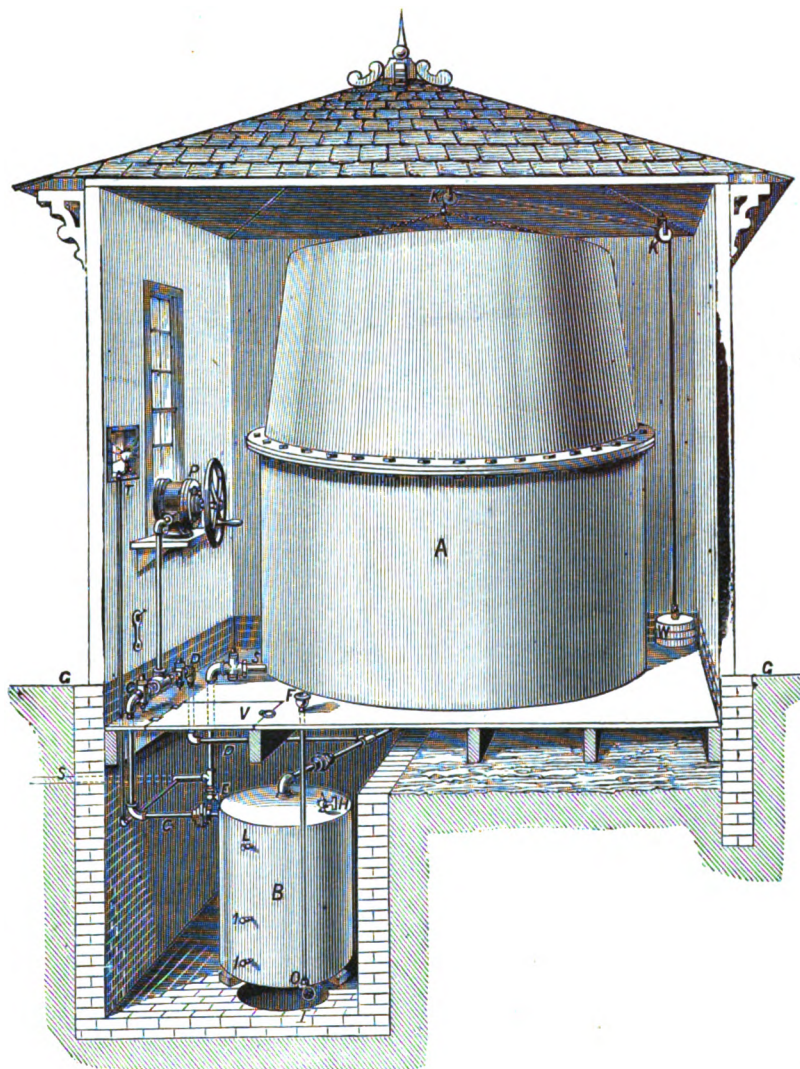
Automatic and simple in construction, designed for illuminating residences, hotels, factories, churches, villages and streets. *Warranted reliable and safe*, as no accidents have ever happened to any buildings lighted by this machine, and to furnish a *clear, soft and brilliant light*, free from smoke or odor; of uniform quality, *summer or winter*, with open or argand burners. *Every part of the machine located in a small gas house, 30 to 50 feet from the buildings to be lighted; same size pipe required as for coal gas.*

To all parties desiring to purchase, a sufficient time is allowed for trial, in order to satisfy themselves that the machine is exactly as represented before paying for it.



BAY STATE GAS WORKS.

Fig. 599.



**PARTIES HAVING OLD FASHIONED GAS WORKS CAN HAVE THEM ALTERED TO THIS STYLE,
AT A VERY SMALL OUTLAY.**

This apparatus consists of: 1st. A ROTARY AIR PUMP OR BLOWER; 2d. A GASOLINE TANK, PROVIDED WITH A DEVICE FOR CARBONIZING AIR; 3d. A GAS-HOLDER.

The Blower is extremely simple in construction, very durable, can not possibly get out of order, only requires an occasional oiling to maintain it in perfect working condition, and is so easily operated that a boy of fifteen years can with ease make sufficient gas to fill a five hundred foot holder.

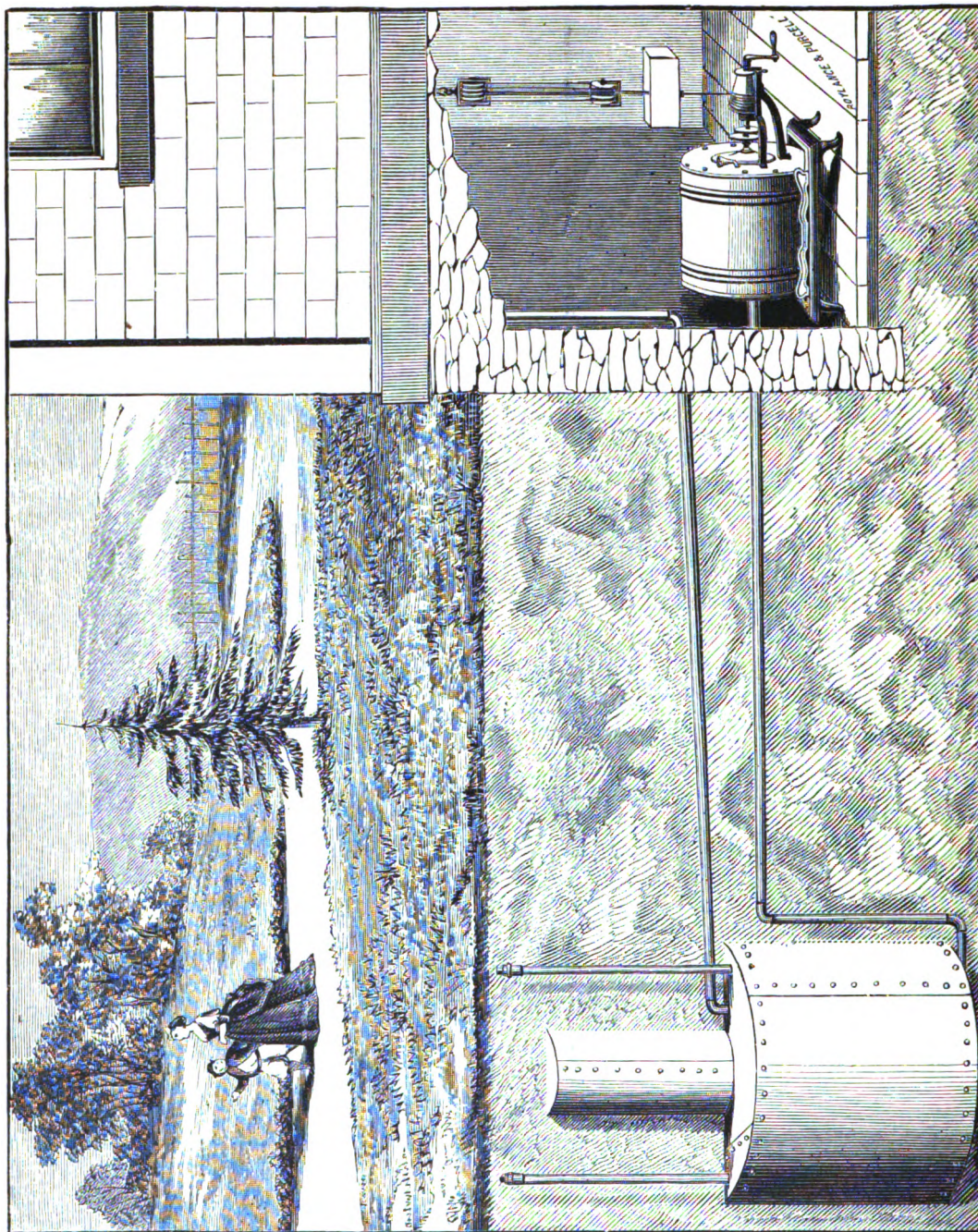
The gasoline tank is of sufficient size to hold three barrels of forty-five gallons each. It is provided with a carbonizing apparatus, which embraces in its construction all of the good points of that connected with the Empire State Gas Machine (still manufactured). Of these especially valuable is that of self-feeding from a fresh and unadulterated supply of gasoline, which is accomplished, here, without wheels, gears or any movable mechanism, whatever. Only a very small portion of gasoline can come in contact with the air at one time, and just so fast as this is absorbed by the air and carried off, more is admitted into the evaporating space, to supply its place. Thus the carbonizing chamber is kept constantly replenished with gasoline taken from the bottom of the gasoline tank, and the mass of gasoline remains untouched. Especial care is taken in the construction of these gasoline tanks to leave no chance for leakage. None but the best materials are used, and only first-class, careful workmen are employed to build them.

The gas-holder furnished by us is so constructed that no water or other liquid is necessary to its operation. This feature of the Bay State Gas Works is an important one, as it renders unnecessary, in the construction of gas-houses, those provisions against cold so essential to the good working of other gas machines. A mere shed will answer for this Works as well as the most carefully constructed gas-house, with double doors and walls filled in with sawdust. A shelter from rain is all that is absolutely necessary.

UNDERGROUND GAS MACHINE,

FOR ILLUMINATING DWELLINGS, CHURCHES, FACTORIES, &c.

Fig. 600.



(The Machine as buried entirely underground. The Pump located in the cellar.)

This Machine requires no gas-house or vault.

It generates gas without fire.

It is as absolutely buried up in the earth as the roots of a tree.

It is free from danger or care.

It is always as ready and reliable as coal gas.

The gas costs only \$1.50 per thousand feet.

The material used is light naptha or gasoline.

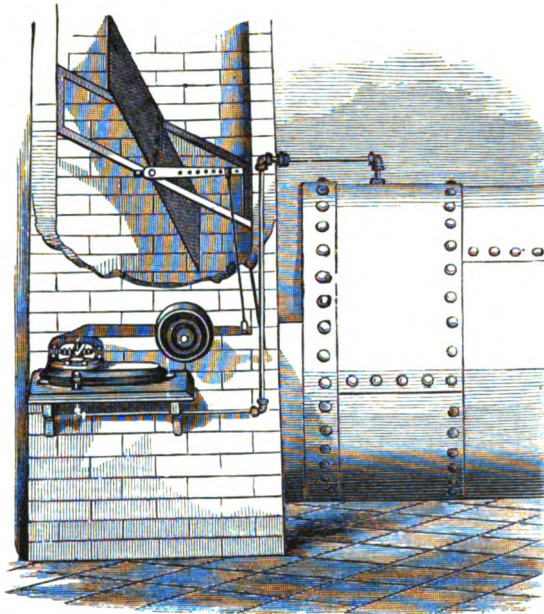
THE GUARANTEE IS A SHORT AND COMPREHENSIVE ONE. IT IS WARRANTED TO GIVE PERFECT SATISFACTION TO THE PURCHASER, HE BEING THE SOLE JUDGE.

A. CARR, MANUFACTURER, NEW YORK.

AUTOMATIC DAMPER REGULATOR.

KNOWLES' PATENT.

Fig. 601.



These Dampers are adapted to high or low pressure boilers. They are sold under a full guarantee and, after one month's trial, if not satisfactory, it can be returned and no charge made.



Fig. 603.

FREEMAN'S PATENT STEEL BOILER FLUE SCRAPER.

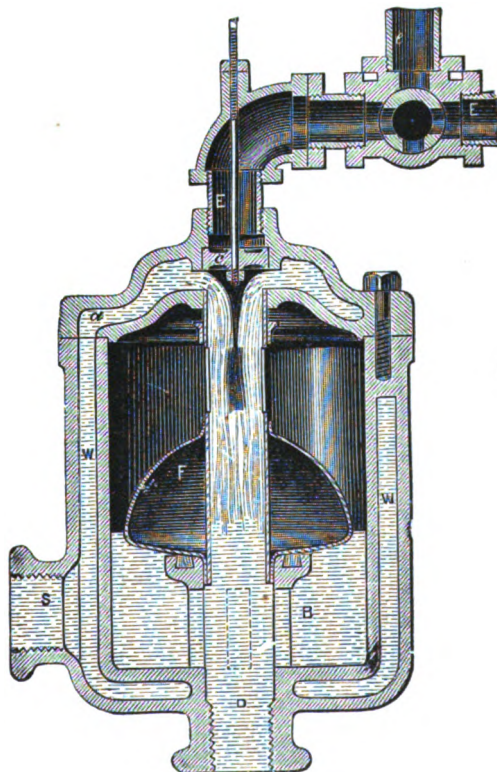


Fig. 602.

FOR STEAM PUMPS AND ENGINES.

CRAIG & BREVOORT'S PATENT CONDENSER.

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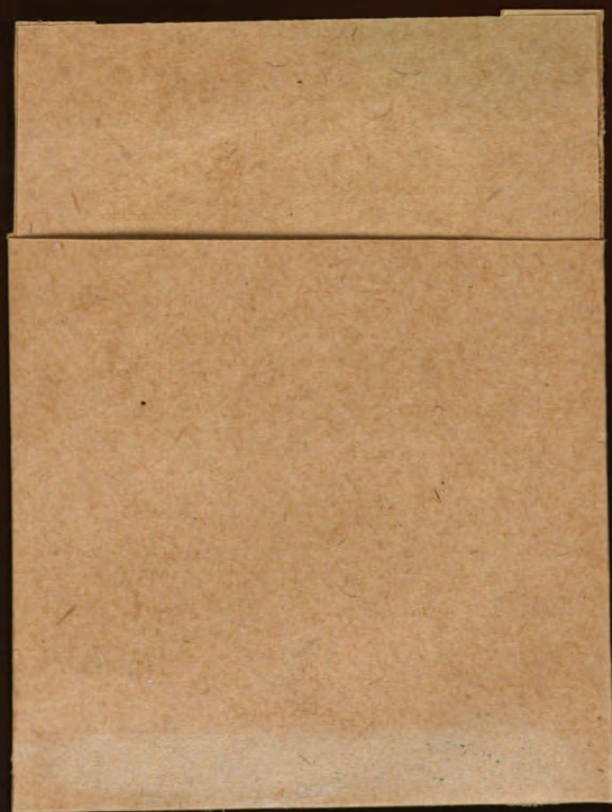
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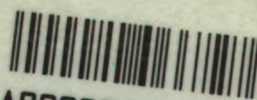
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